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THE BELIEF OF THE ANCIENT EGYPTIANS, ETRUSCANS, AND GREEKS IN THE FUTURE WORLD AS SHOWN BY THEIR STELAE, BURIAL JARS AND GRAVE RELIEFS

PART I

THE belief in the immortality of the soul, or, at any rate the hope for a future existence has been common to all peoples of all ages. The manner in which different peoples have expressed this belief and hope is as varied as are the peoples.

There are certain civilizations of great antiquity that have had a great influence upon historic nations of which we have had but little real knowledge till comparatively recent times. Among these, perhaps, the ancient Egyptians have held a foremost place. Fortunately they left an extensive literature carved on stone or written on papyrus, which has become known to us through the discovery of the Rosetta Stone in 1798. Excavations carried on vigorously for the last 15 years or more have also, through the multitude of objects found, added greatly to our knowledge of this people that lived 6,000, perhaps 10,000 years ago.

A second civilization of which we know less was the Etruscan. That these people came originally from the East seems clear and that they were materially influenced by the Egyptians and by the people of the Mycenean or Minoan age seems also clear.

A third civilization, influenced by these two, and one that exerted a tremendous influence in turn upon all the world since is the Greek.

The belief of these three peoples in a future life, and the manner in which they indicated this belief by their funeral stones and jars is the subject of this inquiry. The subject naturally divides itself into three parts: I. Ancient Egyptian Sarcophagi and Stelæ. II. Ancient Etruscan Burial Jars, so-called Canopic Vases. III. Ancient Greek Grave Reliefs.

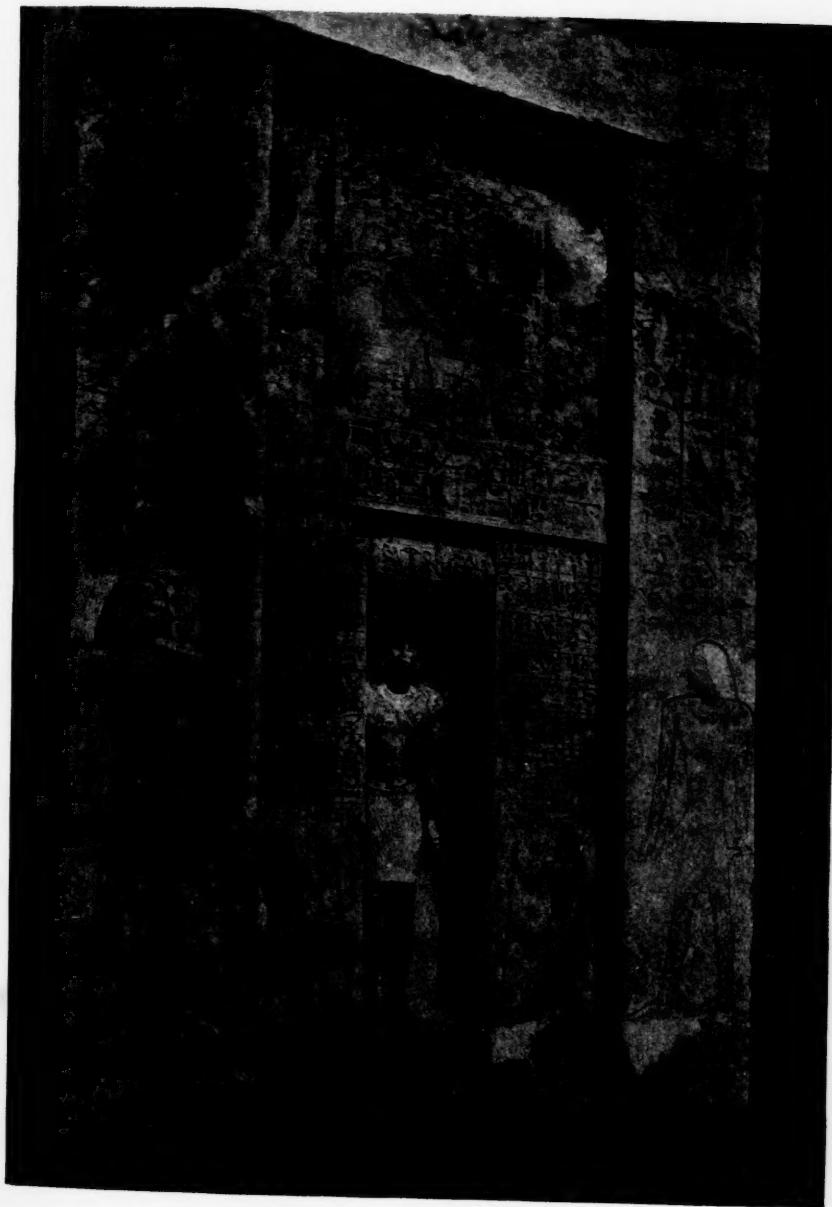
EGYPTIAN SARCOPHAGI AND STELÆ

The religious belief of the ancient Egyptians was most complicated. They saw gods, both beneficial and harmful, everywhere. They did not all see the same gods nor at all times. Their imaginations ran riot. One looked into the sky and saw a great cow with her head to the west. The earth was between her fore and hind feet and her belly was studded with stars. Others looked into the same sky and saw a great female figure with her feet in the East and, bending over the earth, she was supported by her arms and hands in the West. Still others saw the same sky as a sea supported by four columns, the four columns of the firmament.

The sun was a god and no wonder. Who would not worship this great, heavenly, mysterious body which brought to them so much of life? The great hawks that soar sky-ward till they disappear, they must be comrades of the sun, and they too are gods. The river Nile was divine—did it not bring them their very sustenance?

But religion grows, too, from the worship of ancestors. Man dreams and "sees" his dead friends. He sees shadows, he sees reflections in water in the eyes of others and he believes in "doubles." This was not a belief of the ancient Egyptians alone. We shall see that the Etruscans also believed this. Believing in "doubles" man is led to the preservation of the body. In Egypt this was a very possible thing owing to the character of the climate and soil. Therefore the Egyptians preserved the bodies of their dead. And, inasmuch as the man needed a house so, too, the body needed a house to dwell in on account of the existence of the soul. Hence the receptacles of the body, the sarcophagi, are made to resemble a house at first. This is usually not elaborately decorated on the outside though one figure never fails to be found there. This is the representation of the two eyes, which being placed on the outside just where the eyes of the dead man would be found within, marked the entrance to the eternal dwelling place for the soul, or "ka." Within there is elaborate decoration often in bright colors. On the east side, corresponding to the eyes on the outside, is drawn the door through which the "ka" could come and go. On the walls are provisions of all kinds piled high, and all sorts of offerings; besides these formulae and prayers often of great length, are carved upon the sides and ends.

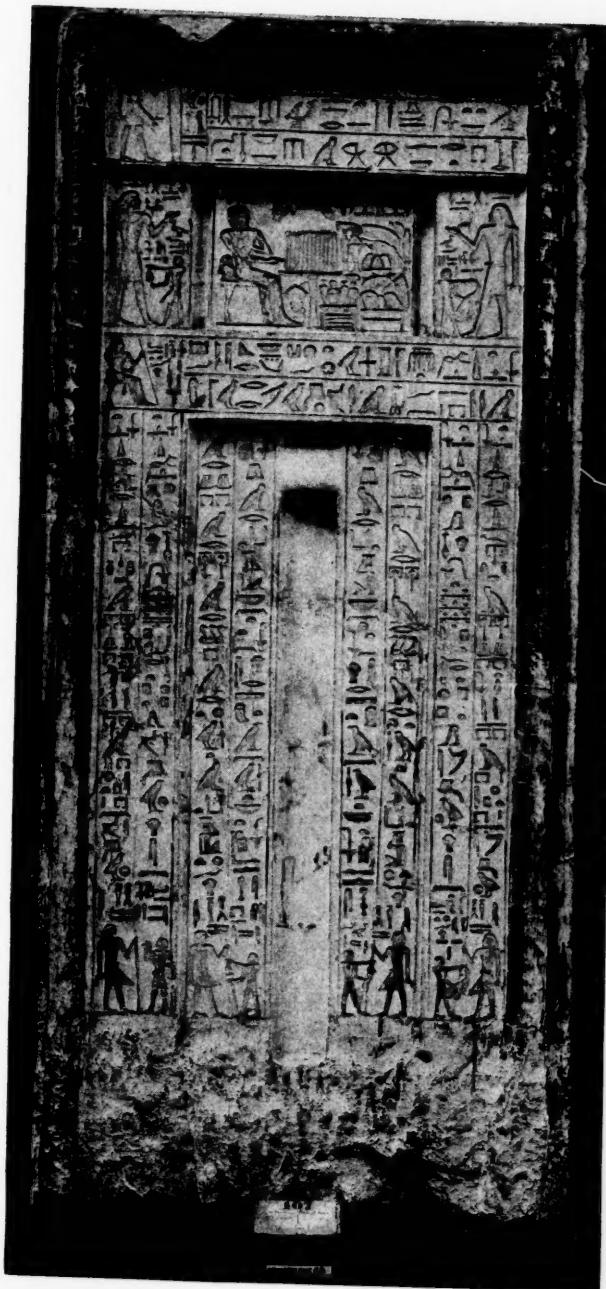
As the religious beliefs and practices develop, so too, side by side with them, the provisions for the dead keep pace. With the dead are buried many valuable things and consequently the fear of thieves arises. This requires more care in the planning and building of the tomb chambers and in the concealing of them and also leads to the making of a double, a "ka," for the body, a statue which shall resemble the dead man. This was a



STELA OF ATETA AT SAKKARA. NEAR VIEW

reasonable substitute for the dead and therefore art grew up as a striking realism. As a further result deception was practised in the making of images and hundreds of statues were made. In time exactness of imitation becomes less and less. Mummifying of the bodies seems to go with this and the image now often imitates the mummy. So Egyptian art tended more and more toward symbolism. The Egyptian never seems to have been able to detach the idea of the future life entirely from the body. Gradually he built up more and more elaborate tombs till we find the huge pyramids of stone scattered along the banks of the Nile for many miles south from Cairo, and in the Theban period we find the elaborate and intricate tombs of the kings, the queens, and the nobles in the hills opposite Luxor. With the coming of the tomb-chambers we find also statue-chambers, where were placed statues exactly like the dead. To this statue the dead man's "ka" might therefore attach itself. Here then offerings could be made to the dead. Originally these offerings were real food, a loaf of bread, possibly some wine, placed upon a reed mat within the tomb. As this food did not disappear it occurred to them that ka-food would be cheaper and easier to provide, as it needed not to be renewed, and would be quite as acceptable to the ka-man. Oftentimes a man might leave a fund of money to provide for permanency in this service. All of this meant more and more elaborate and expensive tombs and equipment therein. This in turn meant more and more danger of robbery and led to greater cunning in the concealment of the real tomb-chamber. Concealment was attempted by cutting long passages in the solid limestone hills and by making at the ends of the passages the tomb-chambers. The entrance to the corridor would be concealed. As these were easily discovered and the mummy rifled, secret chambers were made on the sides of the corridor, or possibly at a lower level and the entrance to this was then walled up so as to conceal the presence of the real tomb-chamber. False doors would then be fastened upon the walls of the corridor or rooms left open to the public. These were sometimes carved in the solid rock and sometimes were merely slabs of stone fastened to the walls. Such a slab of stone is called a "stelæ." In every period of Egyptian history these stelæ were either funeral monuments found in tomb-chambers, as just indicated or they were votive monuments set up by kings or others in the vicinity of temples or along important highways leading to temples. These monuments seem to have had originally different shapes, depending upon the district from which they came. Those of the Memphite period were rectangular, because the houses of that time had flat roofs; those of the Theban period were usually rounded at the top.

Let us examine first stelæ of the Memphite Period. These represent the facade of a house together with the door that opens into the house, the more important part being the door. Undoubtedly the false door, represented on the stela, was originally a real door, opening from the corridor of the tomb into the chamber where the dead man's body lay. One can see plainly the door posts and the lintel as well as the round bolt upon which the door swung. For the sake of better concealment of the body the door-way was later walled up solid and the outlines only of a door were



STELA FROM SAKKARA. THE STELA HAS BECOME ONLY A RELIEF
REPRESENTATION OF A DOOR.

carved on the wall of the last chamber accessible to the living, at the spot behind which it was known that the dead man lay. At first the false door was a real part of the wall and built like the rest of the wall, but in time it was regarded rather as something apart from the wall and so was made of a single stone and generally affixed to the wall where the false door was usually made. The Memphite stela thus becomes the "kiblah" which marked the direction where the dead man lay and the place where his "ka" might pass through. So in front of this stela, thus marking the position of the door, the food was placed, of which it was thought the dead man would want to partake. There are some stelæ which make this fact very clear and a series of 4 may be mentioned which illustrate the changes that the belief underwent.

In the tomb of Maruruka at Sakkara the door-way proper of the stela is not left blank but the figure of the dead man is represented standing in it with one foot advanced as if about to descend the flight of steps into the chamber where the friends and funeral feast would be found. The figure is so life-like that in the dim, religious light of the tomb-chapel the gathered friends might easily imagine that Maruruka was with them. On the stela of Ateta, also found at Sakkara, the ka-statue of the deceased is also represented as standing in the doorway but in this case he stands with both feet together as if contemplating the scene before him but not about to become a part of it (Figs. 1 and 2). In another tomb the entire figure of the dead man is not shown but only the head and shoulders as if the occupant of the tomb were lifting himself up merely to look over into the chapel. A fourth stela, coming indeed from a much later time but in the form of the Memphite period, represents none of the body of the dead person at all but only the head appears above the top of the door.

Thus we see in 4 scenes 4 stages of progress represented by these stelæ. Nibari raises his head, Nofirsimuphtah lifts himself partly up above the top of the door, Ateta shows himself entirely in the door way but stands awaiting the end of the sacrifice, and Maruruka moves forward to partake of the offerings.

The earlier Memphite stelæ very closely resemble real doors. Door-posts, lintels, cornices, all the parts of a real door are easily distinguished. Later they lose their architectural significance and become rather lines or narrow bands. They become only relief-representations of doors, the surface becoming almost if not quite flat that the field may lend itself better to decoration. (Fig. 3)

The inscriptions found upon these stelæ were important, and developed together with the door itself. In the beginning, on the round or half-round bar, was the name of the occupant of the tomb. On the door posts the name with titles, and, in relief, the seated or standing figure of the dead. On the lintel was a prayer or religious formula asking for the protection of the gods. These formulæ were many and varied. The rest of the decorative scheme of the tomb was carried out on the side walls of that chamber and consisted of agricultural and other scenes from the earliest processes of preparing the soil to the finished product of bread and cake from the grains raised. All that interested the dead man in his life time is here

depicted for his delight in the tomb. If he was interested in cattle raising every scene in the life of cattle is represented. The same thing is true with reference to other occupations, such as weaving, the making of shoes or pottery, the building of ships, etc.

In addition to such scenes the preparation and the serving of a great feast is almost universal. Beef cattle are butchered and cut up; beer and other drinks are provided; geese are fattened and prepared for the master's table and scenes of all descriptions are found telling of the elaborate preparations which were made for the lord's happiness.

Upon the lower registers of the relief were represented the scenes meant to be nearest to the spectator. Those higher up were supposed to be further removed. As time went on these stelæ with their prayers and formulæ became an adequate provision for the deceased. If it were read by a priest or a member of the family or even by a chance passerby, it made certain the well-being of the dead. Even if the chapel were destroyed this would be true so long as the stela was intact. The stelæ, therefore, became the important factor in the need of the human being for provision in the after life, and could not be used alone and apart from the tomb and tomb-chapel. The lines then which represented the parts of a door now disappear altogether. The stela becomes only a rectangular slab on which various scenes and inscriptions are grouped often times in a novel way. The deceased sitting at this table is not now the essential part as formerly. Portraits of different members of the family have been added, those who make the offerings. Finally there are at times pictured the forms of gods who preside over the offerings and the two eyes are drawn in the place where the figure of the deceased used to be.

We have been speaking of stelæ belonging to the time when Memphis was all-powerful. When, beginning with the XI dynasty, Memphis lost her power and Thebes, 600 miles up the Nile, became the center of influence, new gods and new ideas of worship crept in. We shall find that the stela, too, changes in form somewhat, in decoration and significance much more. Stelæ in the Theban period gradually change from the rectangular slabs to those with rounded tops, the former, after a time, entirely disappearing. The rounded top undoubtedly represented in the beginning of the Theban Empire the shape of the tombs of that time. As we have just seen the square stela, by the end of the Memphite period, came to represent the entire tomb-chapel. This was also true, doubtless, at the beginning of the Theban period and some of them still represented a false door, but only by very flat surfaces. A cornice they might have, sometimes sculptured, sometimes only painted, and bands in similar fashion represented posts. Soon, however, all semblance to a door disappears and we find a perfectly flat surface which lends itself easily to inscriptions and reliefs. The scenes which we now find upon these stelæ illustrate well the changes which have come since the earliest conceptions. Let us take a single example and examine it somewhat in detail with reference to these changes.

The stela of Antufi, a Theban prince of the IX dynasty, is a good illustration. At the bottom of the stone, in the center, is repre-

sented the door of two leaves, fastened with a bar. Upon the left of the door are two gazelles led by slaves which are being brought for sacrifice and for the lord's feast. The higher register indicates greater distance from us and the animal is consequently slightly smaller. Upon the right of the door, at the bottom, slaves butcher and cut up a beef. Above this, reaching to the top of the door, is an inscription. Occupying the middle register of the stela, Antufi is seated on a chair under a canopy. Behind him are two slaves, one of whom fans him and the other brings to him his staff and sandals. Beneath the master's chair sits his faithful hound. Directly in front a slave reaches out to Antufi a large, shallow bowl containing some sort of liquor. Behind him approach two other men, one bearing a haunch of meat, the other carrying on his head a basket of food. Here also are displayed other provisions of all sorts and in great quantity, together with the standard which supports the ostrich feathers, indicative of high rank. Upon the upper third of the stela is cut an inscription while at the very top is a cornice-like relief running across the full width of the stone.

We remember that in former times all this display of food was made not upon the stela but in relief upon the side walls of the tomb. As the space on the stela is cramped the details are not so numerous as formerly but doubtless the stela has now become a sort of summary of the entire tomb of former years. That there has been a radical change in the beliefs regarding the future life since the Memphite period is revealed by a study of the pictures and inscriptions upon these Theban stelæ. The early idea was that the dead man continued to live in his "ka" which went in and out of his tomb at will and his statue was represented in the false door. In the latter part of the Memphite period and continuing on into the Theban the two eyes are found figured on the stela where formerly the lord sat. They are all that is left of him and they seem to indicate, as well as the eyes usually found upon the sarcophagi, the master looking out of the tomb at the sacrifice and worship going on without. Later on the freedom of the "ka" is enlarged and he is thought of as being able to leave the tomb entirely and dwelling apart from it. There are now several "kas" for the same man, some of which may remain in the tomb, while others may fly afar. As we have already seen this gave rise to the multiplying of "ka" statues so that we find large numbers representing the same man.

In spite of the enlarged freedom of the "ka" given by this new conception, it is still felt that the soul must be fed and provision be made so that it might escape a second death. Here, too, a new conception grows up which effects the formula upon the stela. Formerly the formulæ asked that FOOD AND DRINK be provided for eternity FOR THE KING, AND THE GODS of the lower world, Anubis and Osiris, in ORDER THAT daily the PRIEST MIGHT HAVE SUSTENANCE in the form of food and wines. The new formula reads that the KING GIVES a table of offerings to the god in order that THIS GOD MAY PROVIDE funeral feast of all good things for all times to the "ka" of so-and-so.

It is therefore no longer necessary that the dead man be present at the sacrifice. Some god as his intercessor presented offerings to the "ka"

of the dead man, no matter where he might be. Inasmuch as the place of abode might vary these formulæ were addressed to many gods and the chances that the dead man would be benefited were so many times increased. The actual offering of provisions is not now necessary but prayer to the gods will insure all that the dead man needs. So the pious man believed that he did a good deed if he said these formulæ. He thereby assured favor for himself when he died. No tomb-chapel is now needed. The round-top stela takes its place. It may be located apart from the actual burial place. Stelæ were therefore placed in sacred enclosures or along roads frequented by pilgrims and the passerby was called upon to say a prayer for the dead as he went.

As the Theban period advances changes in the shape and the decoration of the stelæ are made corresponding to these new ideas. Gods now appear, naturally, for the offering and the prayer is to them. They stand or sit upon the left and a table heaped up with offerings is in front of them. Various emblems are carved about them while at the top is the winged solar disc.

The two eyes are there also. These are the eyes of the dead, one representing the sun, the other the moon. Then come two jackals, the guides of the sun through the regions of the South and the North. Many other symbols are found, some on one stela, some on another, according to the belief prevailing in different localities. Rarely however, is the winged sun's disc omitted.

A later step is what might be expected on account of man's proneness to exalt himself. Friends and relatives of the deceased, who endeavored to fulfil the rites due to the departed, desired to figure on the stela. From the XII dynasty onward this desire caused a great change in the outward appearance of the stones. Formulae became short, scenes of worship are abbreviated, and the entire surface of the stone, so far as possible, is covered over with small rectangular divisions containing tiny squatting figures with short inscriptions attached. These are the ancestors and descendants of the deceased to remote degrees of relationship. When the number was too great for all to appear their names only were carved in long rows which might cover the entire front and even the edges and back of the stela. These names are to remind others that their owners had a part in the rites of the honored dead and also to indicate the hope that they may thereby merit a like honor.

The next important change in the stela took place toward the end of the first Theban empire. Amenhotep IV, upon his accession at Thebes, causes a religious revolution. The worship of Amon, the great god of Thebes, he tries to abolish. The power of the priesthoods had become very great and immoral. They sapped the life-blood of the people by their practises, the sale of indulgences, mystic formulæ, etc., to assist the dead in passing through the darkness of the lower world. In order to abolish this worship and to break down the power of the priests Amenhotep moved the capital from Thebes, called Amon a false god, and instituted the worship of Aton. He himself dropped the name of Amenhotep which savored of Amon and called himself Ikhnaton, the beloved of Aton. While he made no attempt to conceal the identity of this god with the former sun-god

"Re," yet he intended that much more should be implied than simply material worship, or rather the worship of the material sun. He tried to deify the vital heat which came from the sun and brought life to all beings. So the god was thought to be everywhere present in his "rays." In this thought lay the chief change in the stelæ. The symbol of the god was a disc in the heavens, from which darted forth earthward multitudes of rays each ray terminating in a hand, each hand grasping the symbol of life.

But the power of the priests of Amon was too great. They fought the new idea and prevailed. Within 25 years, probably, Amon was restored and the capital was moved back from Amarna to Thebes. A stela of this period shows the sun's disk with numerous rays extending hands toward Ikhнатон.

After the restoration of the worship of Amon his priests went everywhere disfiguring stelæ and temples that had been erected to Aton.

We have now traced the practises of the Egyptians in the matter of burial and burial reliefs from the earliest times down to the time when foreign nations came in from the East and brought changes in this respect as well as in many others. With the coming of the influence from Syria, Greece and Rome it may be said that the real character of the ancient Egyptian passed away and we turn rather to other nations to inquire into their practises and beliefs in this regard. That the Egyptians had a marked influence upon these other peoples we shall see as we turn first to the Etruscans and later to the Greeks.

EDWARD W. CLARK.

Rome, Italy.



PRESERVATION OF ROMAN BOAT FOUND IN THE BANKS OF THE THAMES.—The old Roman boat found some months ago at Lambeth has now been treated with several coats of glycerine and remains in an excellent state of preservation. It is nearly 50 ft. long and weighs more than 6 tons. "The ribs, which have been almost flattened out by the weight of the mud which for so many hundreds of years has rested upon them, are fastened to the keel by wooden pegs, which are still well preserved. There is practically no sign of decay in the whole structure, which is complete save for a small portion of the stern which some 20 years ago was accidentally cut away by workmen who were building a warehouse." The coins found with it fix the date of the vessel within 30 years of the close of the III century. Other things found were rams' horns coated with mud, almost like cement; pieces of Roman pottery and horse shoes made of charcoal-smelted Sussex iron. The spot where the boat was found is 25 ft. below the level of the river at high water, some 60 yards from the present bank.



FIG. I. ETRUSCAN TERRA-COTTA HUT-URNS.

THE BELIEFS OF THE ANCIENT EGYPTIANS, ETRUSCANS AND GREEKS IN THE FUTURE WORLD AS SHOWN BY THEIR STELAE, BURIAL JARS AND GRAVE RELIEFS

PART II

THE ETRUSCAN "CANOPIC" VASES

This ancient people of Italy has long been the source of an interesting inquiry on the part of classical students and antiquarians as to who they were and where they came from. The ancient Greeks and Romans themselves did not know and advanced different theories. That they were Lydians was the belief of many and some modern scholars have accepted this theory as probable. Others have argued that they were natives to the soil of Italy, a theory that seems hardly tenable in the light of all the facts. Many objects found on the sites of their cities together with certain similarities seen between their language and the archaic Greek savors of a close connection, at least, with that people. Until some scholar shall be so fortunate as to hit upon the key to their language the mystery of the origin of this people is likely to remain unsolved. Striking likenesses between objects discovered in their tombs and others found in Greek lands and referred to the Mycenean or Minoan civilization leads to the suggestion, for the first time so far as it is known, that they were akin to these peoples, possibly an offshoot from them. A discussion of their origin, however, is

not the purpose of this article. We are, at the present time, interested in it in-so-far as striking similarities are noted between their methods of burial and those of the Egyptians, the subject of our last inquiry.

Whoever the Etruscans were, and from whatsoever part of the East they came, certain it is that they attained a very high grade of civilization and lost their power about the time usually ascribed to the foundation of Rome, the middle of the VIII century before Christ. And while it is true that up to the present time their origin is obscure and the remains of their language are undecipherable, yet the world is by no manner of means in ignorance of the character of this people that occupied a large part of Italy for two or three centuries. Excavations upon the sites of many of their more important cities and particularly the discovery of many of their cemeteries has brought to light a vast number of objects in gold, silver, bronze, clay, etc. that speak volumes for the skill and artistic sense of those who made or used them.

Tombs in Etruria as in Egypt, have produced rich stores of objects in the precious as well as the baser metals which are stored in many museums of Europe. The Etruscan museum in Florence, Italy, has the finest and most complete collection. It is doubtful whether 10 per cent of the visitors to Florence get inside this museum and in fact a visit to such a collection without an interpreter might well seem of little interest or value to the ordinary tourist. With an interpreter, and fortunately it is not necessary to visit the museums of Europe without one, such a visit becomes a revelation of the true value of the objects carefully displayed there.

The interpretation of some of these and similar objects in other museums is the purpose of the present paper.

The Etruscans believed in a future life, but did not attempt to preserve the body as did the Egyptians. Their thought with reference to the "ka," or double was not the same, and climatic reasons forbade such treatment of the dead. Cremation was the common method practised though not the only one, and the ashes were placed in ash urns. These in turn were put inside other and larger jars and buried, or set up on shelves in the rock-cut tombs. They believed that the soul, as we must call it, needed an abiding place and sought to be with the ashes of the body it had formerly occupied.

Exactly as the Egyptians made sarcophagi resembling houses for the mummies of their dead, so the Etruscans said within themselves that if the body when inhabited by its soul had need of a house so the soul apart from the body has a like need and they made the first urns like the huts they then lived in. These hut-urns (Fig. 1) as they have always been called, are among the earliest and most interesting of terra-cotta vases. They are round or oval in shape, and about 15 to 18 in. high, with a diameter slightly less. They exactly represent the houses of the early Italic people. They consisted of the rounded part of the body of the vase together with a gable-shaped roof. The single door was closed with a movable piece of clay and fastened in by means of a small bar of wood, metal or bone. The houses themselves were small round or oval huts, wigwam-like, made by placing in the ground slender poles and filling the space between with

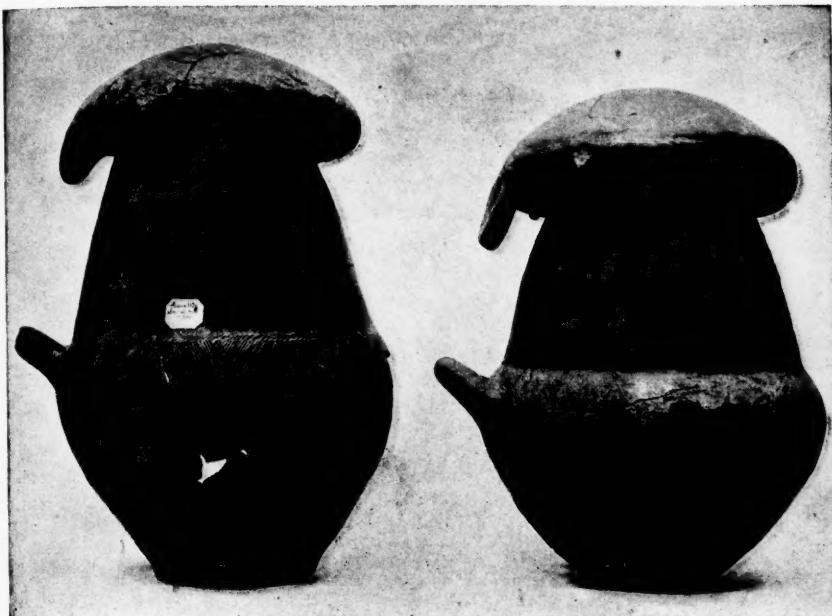


FIG. 2. ETRUSCAN JARS FOR ASHES. SUPPOSED TO REPRESENT THE BODY

woven reeds. Other slender poles were put over the top like rafters and the space between was carefully covered with thatch, the ends of the poles being allowed to project out far from the level of the roof. Poles tied in pairs were then laid over the thatch, one on each side of the ridge-pole to hold the straw in place.

The ashes of the dead were placed directly in these hut-urns, at first, and the urns themselves were commonly put within large dolia, or heavy stone jars. All might then be put into well-like tombs, called *pozzo* tombs, and the top carefully covered with a stone. Sometimes the hut urn was placed in the tomb without the outer jar. Again, these well-like tombs were often made by placing cylinders of clay, 20 in. to 30 in. in diameter, one above the other which then became the lining of the well. The ash urn was deposited at the bottom. Small notches, just large enough to insert hand or foot, were left so that it was possible to enter or leave the tomb as on a ladder.

As time went on, the people reasoned upon these matters and said to themselves that when they were alive the soul lived in a body and the body lived within a house. Why then should not the ashes be placed within a body-like receptacle first and that put into a house-like tomb? The construction of the terra-cotta "body" for the ashes seems to have caused some trouble at first. We find that a rather simple jar was used (Fig. 2) which could be said to resemble a human body only by the active use of the imagination. These jars are about 18 in. to 20 in. high and 8 in. to 10 in. in diameter in the center. This diameter diminished gradually from



FIG. 3. ETRUSCAN BURIAL JAR WITH HELMET LID

the center downwards; toward the top it was reduced considerably all at once so that a shoulder was left. The top and bottom are of about the same diameter, some 4 in. or 5 in. Upon the shoulder is to be found a single loop-handle. This is put on to assist in handling the jar with seemingly no thought, at first, of representing human arms. These jars are of black or red clay and are generally ornamented by incised lines in simple geometric figures.

No attempt was made to represent the human head in the cover but instead shallow, saucer-like bowls with one ring handle were turned upside down to serve as a covering. This seems clear from the fact that many examples have been found where, instead of using this kind of a cover, well



FIG. 4. ETRUSCAN BURIAL JAR WITH HANDLES IN PLACE OF HUMAN ARMS

fashioned helmets constructed of either clay or bronze were used. These were shaped so as to fit down over the "neck" of the body. Without doubt such jars contained the ashes of soldiers (Fig. 3).

While these bowl-shaped "bodies" with their saucer-like "heads" have been found in large numbers, it is apparent that they did not satisfy the artistic sense of this ancient people. They saw that improvements could be made in both parts. Real heads of clay seem to have been the first step. A head is fashioned with a neck which is slightly larger than the neck at the top of the body so that it will slip over easily and stand firm.

The bodies now take a different shape, resembling more a Greek amphora with two jug handles, or loops. These are found toward the top of the jars. The line of greatest diameter has been lifted above the middle of the jar and the handles are placed at that point. Two are almost always found now, which take the place of, though they do not really represent human arms (Fig. 4). So unsatisfactory do these appear that they first



FIG. 5. ETRUSCAN BURIAL JAR WITH ARMS AND HANDS IN LOW RELIEF
AND NO LOOP HANDLES

attempt to represent real arms and hands by marking them out in very low relief on the body of the vase, with fingers outspread upon the breast. Sometimes this is done by continuing the lower part of the loop handle of the vase, where it joins the body, into fingers. Or, leaving the loop handles as such, arms and hands in low relief are added also. Rarely, as is shown in figure 5, no loop handles appear at all, but arms and hands in relief extend almost full length of the jar from the shoulder, which, in this instance, is made to resemble the human shoulder more than is usually the case.

A further step, and one showing much advance, is to make round arms from the elbow, in separate pieces, and fasten them to the ring handles of the vase by rivets of bronze (Fig. 6). The man now has real arms and hands, in the round, which seem more serviceable as they extend out from his body. The upper arm from shoulder to elbow is almost always represented by the vase handles proper. A striking exception to this custom is shown in figure 7. The jar, on the right, represents a soldier. No helmet is worn but the right hand grasps a spear handle. With the left he holds a shield. The small flange-like projection on the left side is a shield

and the hand is beneath it as if passed through a strap on the inside of the shield. Here the right arm is without joint but extends stiffly from the body. The row of knobs about the center of the jar indicates a coat of mail. The features of this warrior are well worked out and the hair imitates the style used in bronze work.

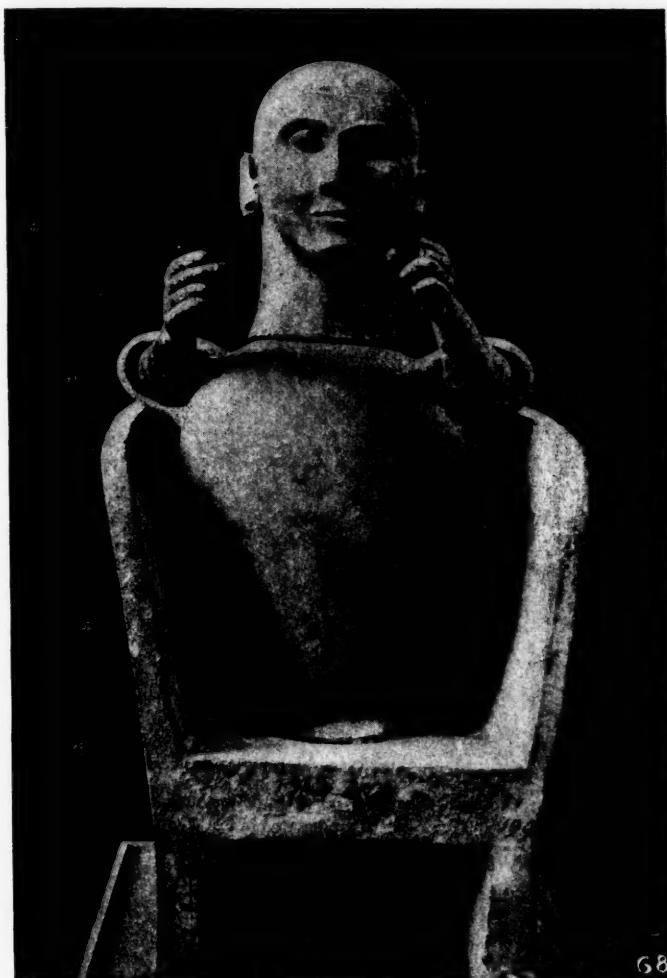


FIG. 6. ETRUSCAN BURIAL JAR WITH SEPARATE ARMS FASTENED TO
THE RING HANDLES

The changes that take place in the head are most interesting. They are made about two-thirds life size and undoubtedly are always portraits. Eyes are generally fashioned simply in the clay, with holes to indicate the

pupil, as in Fig. 5; sometimes they are made by inserting into the clay smooth pebbles. Individuality as expressed in cheek, chin, eyes, forehead, hair and beard is clearly, though crudely at times, brought out. Side whiskers are fashioned in clay and attached, and one may stand in this portrait gallery of the ancients and pick out a Gladstone or other worthy without a too violent use of the imagination. Women are indicated by the use of ear-rings, of bronze and by the representations of breasts.

Nearly all of these figures—may we call them the beginnings of statues?—are made in clay. A few have been found of bronze and the features in these are far cruder. The bronze is merely “pinched up” as it were a little

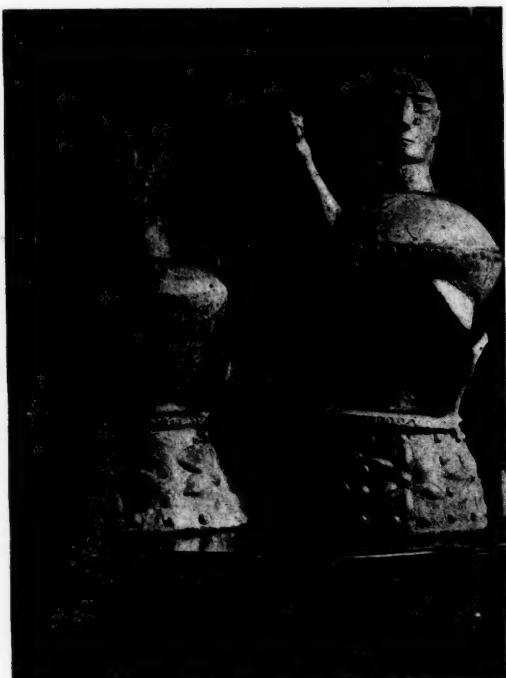


FIG. 7. ETRUSCAN BURIAL JARS WITH REAL ARMS

to form mouth, nose and ears. No attempt is made to fashion the lower part of the body. They stood simply on the bottom of the jar, no lower limbs and feet were attempted at all.

So these bodies for the souls were placed on shelves in the rock-cut tombs. These tombs themselves, often of considerable size, are fashioned like a house with door and ceiling; with wall decorations and furniture. The dead man's soul now has a body to live in and the body has a house to occupy. As with the “*ka*” of the Egyptians there was no difficulty for the soul to flit in and out at will. Solid walls of stone or clay were no barrier. And yet just as the Egyptian sarcophagi always show the two

eyes as an entrance for the "ka," so the heads of these jars always have a perforation. This undoubtedly was made for the escape of the effluvium of the ashes, but we may well believe that it was also intended for the entrance and exit of the soul as it desired to flit about either within or without the tomb-chamber or in the world above.

But now it occurs to these people that while the soul has a body to dwell in and the body has a house yet to be compelled to stand throughout all eternity is a serious matter. If only these bodies could sit down how much more comfortable they would be. With the thought comes the making of a chair. Splendid, comfortable arm chairs are fashioned, in clay unless the body is bronze when the chair too is made of that material. (Figs. 4, 6 and 7). In these the same jars that we have been thinking of and describing are stood, but they are now thought of as sitting down and greater comfort is enjoyed. Dignity and position of power within the state



FIG. 8. ETRUSCAN BURIAL JAR REPRESENTING A MAN AND HIS WIFE

is probably marked by the additional comfort and elegance of the chair. And then, as was natural, it occurred to them that to sit always becomes tiresome. If they could only recline, the nights and days of eternity would not be so hard to endure. And with this thought come couches with thick soft mattresses and cushions upon which they may recline with comfort. Only one thing seems now to be lacking and that is company and when husband and wife are placed on the same soft cushions and before them is put a table with toilet articles the greatest comfort possible seems to have been secured. (Figs. 8 and 9).

Perhaps this, too, was the process by which they changed from cremation to inhumation, although it is impossible to say that one method of



FIG. 9. ETRUSCAN SARCOPHAGUS WITH FIGURE OF LARTHIA SEIANTI

disposal of the dead was earlier than another. The ancients themselves used to discuss which was the older method. Both practises are found side by side, notably in the primitive burying ground found in the Forum at Rome.

There are many ash urns of a later date than these described which are made like small rectangular sarcophagi and almost without exception reclining figures are represented upon the covers. These are frequently made of alabaster, and reliefs on the front picturing hunting scenes, battles, etc. are common. Bright colored paints are frequently used on these reliefs and the death angel with the mallet, his symbol, is frequently found conducting the soul to the lower regions.

Within the rock cut tomb-chambers elaborate furniture was placed consisting of chairs and many utensils of clay and bronze. Upon the walls were painted in bright colors banquet scenes which, as on the tomb-walls in Egypt, included not only the banquet itself but also the preparation of the feast in the kitchen and the larder.

These funeral vases that have been described are commonly called "Canopic vases" as they are similar to vases used by the Egyptians which were wrongly so-called from Canopus, a city in the Delta. When the Egyptians prepared the bodies of their dead for embalming they took out the viscera and enclosed them in four jars, each dedicated to a separate god, and each jar having as a cover a head of the god to which it was dedicated. One had a human head, one a head of an ape, one of a jackal, and

the fourth of a falcon. The similarity between these face jars of the Etruscans and the "Canopic vases" of Egypt has given the same name to both. That there was an influence exerted by the Egyptians upon these people in their eastern home before they migrated into Italy seems probable. This has been noted before. The marked difference between the two peoples in the matter of the disposal of the dead, as has been remarked, is largely due to climatic reasons. That the Etruscans believed in a future existence of their dead has been clearly proven. More details, as for instance those pertaining to prayers and formulæ, may be ascertained when the key to their language is discovered.

Unfortunately the remains of their language are very scanty, indeed, and our future knowledge of this more or less mysterious people may possibly have to come from further excavations in their city sites and cemeteries as in the past.

EDWARD W. CLARK.

Rome, Italy.



THE ANCIENT CORNISH SERPENT DIVINITY OF THE SEA

IN A former paper read at a meeting of the Royal Institution of Cornwall, I gave a summary of the proofs of the existence of ancient serpent worship in western Britain. I showed that even in the primeval days of the palæolithic period, the early inhabitants of England who belonged to the Cro-Magnon race were serpent worshipers and that engravings carved on bone and horn in the caverns of western France of that remote time portrayed the great sea-serpent swimming in the midst of the waves, and represented sacrifices being offered to appease the wrath of the mighty serpent-divinity of the ocean. Coming to later times immediately preceding the dawn of history in Great Britain, I showed that the short dark pre-Celtic race in the west of Ireland were serpent worshipers and that the same veneration for serpents prevailed in prehistoric times in the Highlands of western Scotland and the Hebrides. The dark Silurian race in Wales were shown to be serpent worshipers, by the conflicts between the early Christian saints and serpents and dragons. In Devonshire the earliest tinners on Dartmoor were said to have fought with serpents, and traditions have been handed down of various localities in Dartmoor which were said to have been haunted by terrible dragons and serpents. In Cornwall also the same stories prevailed. The saints and heroes fought with dragons and serpents, and these legends could best be explained by considering them to be recollections of the conversion of serpent-worshiping priests, and the destruction of their strongholds and the overthrow of their idols.

I now wish to examine the evidence for a special sea-divinity worshiped in Cornwall, and to compare this evidence with similar facts gathered in various portions of Great Britain.

The worship of demons and goblins goes back to the remotest antiquity, and prevailed in Cornwall in very early days. The lanes, roads and moorlands were haunted by "Buccas," and I distinctly remember these stories of Buccas prowling about the lonely paths when I was a boy. From being applied to these goblins and demons, the term has in our days degenerated into a designation of a scare-crow, but its earliest signification is perfectly plain. All over Cornwall we find places named after these Buccas or goblins. Thus we have "The Bucca's Hill," "The Bucca's House," "The Bucca's Barrow," "The Bucca's Town" and many others could be found if searched for. Buccas (or goblins) in fact were everywhere feared in ancient Cornwall. Similar terms were used of demons and goblins elsewhere. In Scotland the Bucca is a water demon in the Hebrides,¹ and the highlands and lakes were, until recently, said to be haunted by goblins named Buccans, which possessed terrible power. At the present day the term Bucca is used by the natives of Ceylon to denote a demon. But whilst these minor demons were said to haunt the woods and moorlands of Cornwall, there was preëminently a mighty divinity which had its home in the sea and presided over the winds and waves of the ocean. In ancient times there seem to have been two supreme Buccas or divinities revered in ancient Cornwall. The first of these was named Bucca Gwidden which may be said to mean "The God of Light" or the benevolent divinity. The other was Bucca Dhu or "The God of Darkness" and was evidently the evil divinity, whose terrible wrath had to be propitiated and whose favor had to be secured by sacrifices.² The term Bucca Dhu was altered into Bucca Boo, which in later times became the popular name of this dreaded divinity. I well remember, when a boy, what was the popular idea of the Bucca Boo. It was a horrible monster that dwelt beneath the waters of the ocean and raised its body from time to time—like the great sea-serpent—to scare voyagers and fishermen. The Rev. W. S. Lach-Szyrma tells us that³ the Bucca Boo stole the nets of the fishermen of Newlyn. Some of the Paul choir, however, so terrified him by singing hymns that he threw away the nets which were turned into stones. This story is probably a dim recollection of the conflicts between the early Christians and the worshipers of the ancient Cornish sea-god.

Now recent researches have proved that at the time of the Roman conquest the greatest of all the divinities worshiped in Britain was a sea-god or Lord of the Ocean, who had his home in the deep and who had special power over the winds and waves. The ancient Silurians at Lydney on the Severn worshiped this marine-divinity and they portrayed him seated on the waves surrounded by serpents and sea-monsters.⁴ In Ireland he was worshiped under the name of Nudd and was called "The God of Darkness," which is exactly the same name as Bucca Dhu in Cornwall and Nud was the greatest divinity in Britain. Another name of this sea-god was Domnu, and Professor Rhys tells us that the dumnonii of Scotland and by

¹*The Dolmens of Ireland.* By W. C. Borlase, vol. iii, p. 911.

²*Traditions and Hearthside Stories of West Cornwall.* By William Bottrell. 2nd series, p. 246. See also *Cornish Feasts and Folk Lore.* By M. A. Courtney, p. 129.

³*A Church History of Cornwall,* p. 2.

⁴See *The Hibbert Lectures for 1886.* By Professor Rhys. Cheap edition, p. 126.

the Severn were called after the name of this ocean-divinity.⁵ We now bring this evidence into Cornwall. Mr. W. C. Borlase says "The Dumnonian Akron in Cornwall (*i.e.*, the lizard) and the early name of the Dumnonii in that peninsula, may mark an early settlement of the people who bore this sea-god's name."⁶ Professor Rhys also tells us that this sea-god was the chief divinity of the Silurians and we know that these dark-haired and swarthy Silurians had settlements in Cornwall at the time of the Roman conquest. From all this it is clear that when the Roman armies entered Britain the adoration of the mighty sea-god prevailed not only in many portions of our country but was the principal form of worship in Cornwall.

What form was this terrible sea-god supposed to assume? My own remembrances in my boyish days picture it with the head of a man and with a mighty body of no definite form hidden deep beneath the waters. In Scotland the Rev. J. F. Campbell tells us that a mighty serpent with the attributes of a sea-god was believed to exist in olden days by the inhabitants of the Western Highlands and the Hebrides.⁷ Even in the present time the fishermen in the Hebrides have the greatest horror of the eel and believe it to be a descendant of the serpent that tempted Eve in the Garden of Eden.⁸ Here undoubtedly is a dim recollection of a mighty and terrible ocean-divinity which had the form of a serpent and had to be propitiated by sacrifices. Another evidence of this is found in the character of the mermaids, the superstitions relating to whom seem not to be correctly understood. At first there seems to be little connection between a gigantic sea-serpent and a creature half woman and half fish with a form such as we see carved on the end of one of the bench-ends in Tennor church. Nevertheless such a connection certainly exists. The Babylonian Dragon of Chaos was represented on the Chaldean tablets with the body of a woman terminating in the coils of two serpents.⁹ The Rev. S. Baring-Gould refers to the curious water-fairy Melusina,¹⁰ the legend of whom is preserved in southern France. This was the chief fairy in France and was half a woman and half a serpent. Mr. T. Crofton Croker tells us,¹¹ that the Irish word Merrow (or Mornach) means both a mermaid and a sea-monster. In the same work we read that Pontoppidan's sea-serpent had a mermaid companion and that in A.D. 887 a mermaid 195 ft. long was cast ashore on the north coast of Scotland. In one of his Scottish rambles Sir Walter Scott was fortunate enough to meet a man who had seen a mermaid. According to this individual, the mermaid was a long serpent with a mane and red fiery eyes.¹² This is probably a confused recollection of still more ancient stories. Barry Cornwall has put the same idea into poetry in the words

⁵*Ibid.*, p. 597.

⁶*The Dolmens of Ireland*, vol. iii, p. 771.

⁷*Popular Tales of the West Highlands*, vol. ii, p. 386, vol. iv, p. 308.

⁸See Miss Gordon Cummings' *In the Hebrides*, pp. 366-7.

⁹*Babylonian Influence on the Bible*, by Rev. A. Smythe Palmer, p. 23.

¹⁰*Curious Myths of the Middle Ages*, pp. 470, 496.

¹¹*Fairy Legends and Traditions of the South of Ireland*, edited with notes by T. Wright, p. 188.

¹²*The Pirate*. Notes to chap. II.

The sea-beast he tosseth his foaming mane;
He bellows aloud to the misty sky.¹³

In the Island of St. Agnes in the Scilly Isles is the now-filled up well of St. Waurna. Formerly at this sacred spot prayers were made to the saint whose name the well bears that the winds and waves might bring a "good wreck" to the inhabitants.¹⁴ Tradition brings St. Waurna from Ireland, but nothing further is known and the fact that the saint was supposed to rule over the winds and storms of the ocean shows at once that some great superhuman person was indicated. The worship of wells in Cornwall is evidently a relic of pre-Christian times and in later days it was associated with the names of Christian saints, some of the latter being called by the name of the ancient divinity. Thus the name of St. Waurna is singularly like Waruna the great Sanskrit god of the ocean who presided over the winds and waves. These points seem certainly to connect Waurna with the great sea-god of ancient Britain Domnu, and with the Cornish ocean-divinity Bucca Dhu. There is another fact that supports this conclusion. The ancient Silurians—a pre-Celtic race—worshiped the mighty sea-god Domnu and this race was spread over Britain before the arrival of the Celts. The Scilly Isles long ago bore the name of the Silurian Islands, evidently from the Silures who had made them their place of refuge, and whose relics may be found in the sepulchral barrows and so-called Druidical remains which exist in various parts of Scilly.

Sacrifices and offerings to the supreme god of the sea were common everywhere in ancient times. They were offered up in many places in Great Britain and traces of them can even now be found in Cornwall. The occasion of offering these sacrifices was the desire to have a successful voyage or a prosperous fishing season. At the same time the wish to appease the terrible lord of the ocean and to stand high in his favor should not be lost sight of. These sacrifices were frequently of human beings. In ancient history maidens were often said to be chained to a rock to be devoured by a sea-monster, and were frequently delivered by the aid of some hero who slew the monster. The story of the deliverance of Andromeda by Perseus and of Hesione by Hercules are illustrations of this idea. The maiden was devoted in sacrifice to the great serpent-god or dragon of the sea and the priest of the serpent-god who was about to kill her was, in turn, slain by the warrior, so that the death of the priest of the serpent was in after times looked upon as the destruction of the monster itself. I am convinced that this is the explanation of the many ancient stories which relate that maidens devoted to be devoured by a sea-monster were delivered by a warrior who slew the monster. Now, in Scotland in ancient times similar stories such as the deliverance of Andromeda by Perseus were believed. Maidens were said to have been constantly offered to a great sea-dragon which was devastating the land,¹⁵ and were rescued by some brave man who slew the monster.

¹³*English Songs*, 1844, p. 128.

¹⁴*Cornish Feasts and Folk Lore*, by M. A. Courtney, p. 119.

¹⁵These stories are given at length in *Popular Tales of the West Highlands* by Rev. J. F. Campbell, vol. i, pp. 77, 97, 101.

The Kelpie or water-demon of Scotland affords another illustration of the truth of this theory. Every mountain-lake had its Kelpie which lived beneath the waters and the same terrible sprite haunted the rivers and the seashore. When a victim was required by the Kelpie, the demon sang a plaintive wailing song and someone was sure soon to be drowned. The screaming of the Kelpie near the sea-shore was also a terrible indication that a wreck with loss of life was soon to occur. Sir Walter Scott has preserved this superstition in the words:

The fishers have heard the Water-Sprite,
Whose screams forbode that death is nigh.

Here it seems to me we have a dim recollection of a sacrifice offered ages ago to a water-god and a death-song sung by the priest before the human victim was selected. The memory of the event was retained in a confused manner long after the introduction of Christianity into Britain. At this very day in the island of Amergos, one of the Cyclades in the Grecian archipelago, the inhabitants believe that there is an evil spirit which rises from the sea and carries off children, a special charm being used for their restoration.¹⁶ This is another recollection of children being devoted to the sea-god in distant ages. The singing of the mermaid is one of her chief characteristics; and it generally ends in the death of those who are led by it to meet her on the shore. Hence those places where the mermaid sang were specially to be avoided. The origin of the mermaid legends does not seem to have received the attention that it deserves, and the figures of the Syrian sea-goddess Atargatis, which was half a woman and half a fish, whose worship was derived from Babylon, give us a hint as to the origin of the stories of the mermaids and the original character of their position. I believe the later stories originated from the priestesses of the sea-god, who had their sacred places in islands and on the sea-shore. They controlled the winds and waves and offerings were made to them in order that they might procure favorable weather. These priestesses abounded in Lapland, where the sea-god was worshiped under the form of a gigantic serpent.

In later times when human sacrifices began to be discontinued, animals were devoted to the sea-god, and even simpler offerings were given to him. Martin tells us¹⁷ that in the Hebrides in the XVII century on Hallow-e'en one of the inhabitants waded into the sea in the presence of a crowd of sympathizers and poured a cup of ale into the water as a libation to the sea-god to send them plenty of sea-weed. After the libation they all went to the church and then spent the rest of the night at home and in the fields feasting and dancing. In the present day a similar ceremony prevails amongst the wild black inhabitants of the Philippine Islands called Tagbanuas M. Marche informs us¹⁸ that at midnight on a regular day each year a sacrifice is offered to *Poco*, the sea-god. A priest in the presence of a crowd of spectators wades into the sea and launches into the waves a little raft containing fruits, vegetables and cooked poultry. If the raft is carried out to

¹⁶Mr. Theodore Bent in *Macmillan's Magazine*, July 1884, p. 200.

¹⁷Description of the Western Isles, p. 29.

¹⁸Luçon et Palonan, p. 322.

sea the omen is favorable, but if it is cast up on the shore universal consternation prevails, it being concluded that the god refuses the peoples' offerings and will speedily punish his worshipers.

Now to apply all this to Cornwall. I am not acquainted with any *direct* evidence that human sacrifices were offered up in our County to the great water-god Bucca Boo (*i.e.*, Bucca Dhu). On the other hand *indirect* evidence does not appear to be entirely wanting. One particular story is well known in Cornwall on the sea-coasts. I believe it used to be repeated in the neighborhood of St. Agnes. In the calm of the night a voice is heard from the sea exclaiming, "The time is come, but not the man!" This is repeated several times. Then a man suddenly appears on the shore, rushes into the sea and is swallowed up in the waves. Here we have the sea calling for a victim and never calling in vain. The story is a dim recollection of a sacrifice offered in Cornwall on the shore to the sea-god. The time was come. The priest was ready and he pronounced to the assembled multitude the words, "The time is come but the man is not come." The victim was then chosen by lot, killed and his body was cast into the sea as an offering to the awful god of darkness who had his dwelling in the depths of the ocean. Remarkable confirmation of this view comes from Wales. Among the lonely Welsh mountains and by the shores of the Welsh lakes, Professor Rhys tells us,¹⁹ an exactly similar story is related. The Welsh peasants say that in the darkness of the night a voice cries from the depths of certain lakes "The hour is come, but not the man." A human figure then appears, rushes into the lake and sinks into the water. This is exactly the same story as our Cornish legend and it is the Spirit of the Lake calling for a sacrifice, and is clearly a recollection of human sacrifices which were offered to the water-god. A mighty monster called the Afanc dwells beneath the waters of the lakes and the same idea precisely prevails in some parts of Ireland.

We can gather further that in Cornwall in far distant days human sacrifices were offered to the mighty sea-divinity by the manner in which the mermaids constantly drowned, or in some other way, killed men. All around our Cornish coasts mermaids by their song entrapped men and then drowned them, I may merely mention the mermaids which were connected with Tennor and Perranporth as instances. The singing of the mermaid is a recollection of the death-song of the priestesses of the sea-god, which they sang before killing the victim. In Italy it was believed that the mermaids swallowed men,—an idea which may have been a dim recollection of the custom of throwing the victim alive into the sea and thus offering him as a sacrifice to the sea-god. Possibly the casting of Jonah into the sea was quite in harmony with the religious rites which had been witnessed by the Phoenician sailors. In the early part of the last century the beach of Porthminster near St. Ives was said to be the favorite haunt of mermaids, and children were specially warned not to approach it alone. The wailing song of the mermaids is spoken of even now by some old St. Ives fishermen and was, when heard, an omen of terror. The same wailing of the mermaid

¹⁹*Celtic Mythology*, vol. 1, p. 244.

on the Doom Bar at Padstow foretold disaster and was the sea calling for a victim. The Irish word Merrow, which means both mermaid and sea-monster, occurs in Cornwall as a name of a locality.²¹ That the priestesses of the sea-god offered these sacrifices to the divinity of the ocean seems to me to be undoubted. In the holy ilses of Amnis and Sena near the mouth of the Loire and Brest there were in ancient days priestesses who offered up human sacrifices and controlled the winds and waves, exactly as our Cornish mermaids were supposed to do. In Mont St. Michel in Brittany also these priestesses had power over the elements. That the stories relating to our Cornish mermaids refer to these priestesses I do not doubt.

When milder views prevailed, human sacrifices to the sea-god were discontinued, but animals were still offered up to the terrible divinity. Little more than 100 years ago a calf was sacrificed in Cornwall and at the same time a bullock was in Wales often thrown into the sea as a sacrifice to the devil.²² Similar sacrifices were offered on the Scotch mountains and islands to Mourie, a recollection of the mighty divinity so universally worshiped in ancient times.

The idea of the sea calling for a victim used to be commonly entertained in many places in Cornwall. It was expressed in the words "Bucca is calling" or sometimes "Clodgy is calling." Miss Courtney tells us²³ that years ago there was a marsh between Penzance and Newlyn, now covered by the sea, known to the old people as the "Clodgy;" when the sea moaned there they said, "Clodgy is calling for rain." Sometimes at the present day it is Bucca is calling. All this is the well known calling for a victim, which was signified by the cry of the Kelpie, the scream of the Water Sprite and the song of the Mermaid. It would be interesting to examine the connection which exists between Bucca and Clodgy in other parts of Cornwall. The existence of so-called Picts Houses at Clodgy Point, near St. Ives, may have a significance which has up to the present escaped our Cornish archaeologists.

Other offerings of a simpler character were in ancient times in Cornwall offered to the Bucca Boo. Thus it was the custom of the fishermen of Penzance and the neighborhood to leave offerings of fish on the beach for the Bucca Boo and Miss Courtney in addition to this has drawn attention to the fact that in harvest a piece of bread was thrown over the left shoulder and a few drops of beer spilt on the ground as an offering to the terrible Bucca²⁴ (this was probably Bucca Gwidden). The story of the Bucca Boo stealing the nets of the Newlyn fishermen and being pursued by them over the downs until the demon threw away the nets is well known. The Rev. W. S. Lach-Szyrma also tells us²⁵ that near Penzance was a tree sacred to the Bucca Boo, of which it was said that anyone who harmed it would be changed into an animal. Notwithstanding this prediction, a Newlyn fisherman cut the tree down and was none the worse for his achievement.

²¹Near the shore of Gerrans Bay and near Tchidy.

²²In the Hebrides, by C. F. Gordon Cumming, p. 195.

²³Cornish Feasts and Folk Lore, pp. 84, 85.

²⁴Ibid., p. 120.

²⁵A Church History of Cornwall, p. 2.

The general characteristics of the great Cornish sea-divinity the Bucca Boo, are thus summed up by Mr. J. Henry Harris:—"A spirit of undefined but terrible powers for good and evil dwelt in ancient times in Cornish coves. The 'Bucca' was on sea what Piskey was on land only more terrible and held the fishers in the hollow of his hand. They paid him toll, and when in the silence of the night a Bucca's voice was heard calling a man by his name, he trembled and paled with fear, for he knew he was a doomed man. Bucca had power over the winds and waves, and could bring good or bad luck to the fisher so he was lord of the fishes also."

"In the olden times the Church tried conclusions with Bucca and failed. The good Saint Waurna promised to send wrecks and good luck to the men on the coast if they would pray to him, and lay gifts upon the altar instead of throwing them on the sands to Bucca; but the name of the Saint did not travel far, and never reached our cove. The good Saint Anthony made the fishes sing praises to God, but the powers of Bucca remained the same and were so firmly believed in that they may be traced to this day."

"It was Bucca who would have fishers silent at sea, if a man whistles he might raise a storm, if he sang he would catch nothing. The cove-men delight to tune up on land, but on the water are as quiet as dormice. The old Bucca was not a poet, and so our deep-sea fishermen have no songs. In this the fishers and sailors differ; the latter possess songs and 'shanties' composed of the passion and license of all lands, but the fisher is dumb. When the fishers 'tuney up a bit' on the cliffs, they are fond of something stirring, and will 'pitch the last new berying tune,' or something warm from the last 'revival,' for the atmosphere in which they dwell is religious. During the long hours of drifting at night, the men lie quiet in their cuddies, or hang about the decks until it is time to draw in their nets. The shadow of Bucca is still felt, or else the pursuit of a silent prey silently in the deep sea is wanting in inspiration; and the fact is that during the centuries our fishers have not hammered out a fisher song worthy of the theme. A survival of paganism has been allowed to die out. At the commencement of the spring fishing, bonfires were in olden times lighted, and there was feasting and wrestling and much rejoicing. In Brittany the Church adopted the custom and made it Christian; but in our Cove the boats go and come in the sunlight and shadow, in the tempest and calm, without benediction, and there is no special thanksgiving at any time for the abundant harvests of the sea. There are old men who say things went better when they were young, and that Bucca was very good to them."²⁶

This extract sums up all the traditions that Mr. Harris was able to gather about the Bucca Boo, and—as we before noticed—particular stress is laid on the voice of the Bucca calling from the sea, and claiming a victim, a recollection of the human sacrifices to the sea-god. In Christian times the Bucca Boo was naturally superseded by Satan, who was supposed to have his home in the deep. The blending of the two beliefs can be traced in many superstitions of sailors, some of which have survived to the present day. The awful "Davey Jones" of sailors was simply Satan, who was en-

²⁶*Our Cove. Stories from a Cornish Fishing Village*, by J. Henry Harris, pp. 19-22.

grafted upon his heathen predecessor, Bucca Boo. The name "Old Nick" for Satan has a similar origin. It is derived from the Scandinavian water-demon or water-wraith, the same as the Scotch Kelpie. Nekkan or Nikken is the evil spirit of the Scandinavians. The Nicks in the north of Europe inhabited lakes and rivers, exactly in the same ways as the Kelpies in Scotland were supposed to do.²⁷ The mighty serpent of the Scandinavians, the Midgarsormen, the enemy of the Norse gods and the personification of all evil was also called Nidhög²⁸ and was—

That sea-snake tremendous curled,
Whose monstrous circle girds the world.

The same name may be traced in Scotland in the malignant goblin the Nick-neven.

In Cornwall there are recollections of customs which in lonely parts of our County still survive. Thus in former days in Cornwall the night before Shrove Tuesday was called Nicky Nan night when boys and young men representing evil spirits prowled about and did all kinds of deeds of darkness.²⁹

The underground dwellings in Cornwall such as those at Pendean, Bolleit, Boscaswell and Chapel Enny would seem to supply similar evidence. They remarkably resemble those constructed by the Lapps in the past and in the present. The heathen Lapps worshiped a vast serpent and had their priestesses who professed to control the winds and waves.³⁰ If our underground Cornish dwellings prove that a short Mongolian race akin to the Lapps lived in Cornwall, then there probably existed here the worship of a mighty serpent-divinity in the sea. This primitive race handed down the belief in the sea-god to our Celtic forefathers in the shape of the tradition of the Bucca Boo, exactly as the ancestors of the present Lapps passed on their belief in the serpent-divinity of the ocean to the Scandinavians and Norsemen who overcame them.

Whence came this worship of the serpent-divinity of the sea, how was it introduced into Britain? That it was introduced into Cornwall and the neighboring parts of Britain by the Celts is, I think, highly improbable. It has been stated by a high authority on folklore that the Celts were not serpent worshipers. I agree with this statement in the main, but I believe that the Gaelic Celts adopted into their worship the veneration of the serpent, which they found practiced here by the pre-Celtic tribes, on their arrival. Nor is it possible to assign a Phoenician origin to serpent worship in Britain. Certainly the Phoenicians believed in the existence of a vast serpent or dragon in the sea, but their visits to Britain only affected a very small part of our island. They never reached the north of Scotland, the Hebrides and the wilder parts of Western Ireland, and it was in these very parts of Britain that the sea-dragons were specially venerated. More-

²⁷Brewer's *Dictionary of Phrase and Fable*, p. 614.

²⁸*Ibid.*, p. 615.

²⁹*Natural History of Polperro*, by T. Couch, p. 151. Miss Courtney says that a similar custom prevailed in the Scilly Isles.

³⁰*The Dolmens of Ireland*, vol. iii, p. 1160.

over, when we find that in the remote regions of northern Europe and amidst the inland districts of North America which never came under Phœnician influence the same belief in the great serpent-divinity prevailed, it is quite clear that we must look elsewhere for the origin of this worship. Another theory is that it arose from the presence of a veritable sea-serpent which in prehistoric times lived in the sea—although it has long disappeared—and the appearances of which filled our remote ancestors with such terror that they venerated it with the utmost dread and awe. This theory needs little consideration as the existence of the sea-serpent at all is too problematical a subject for discussion. I feel little doubt myself that the great serpent-divinity of northern Europe is similar to the mighty dragon of the ocean which was such a prominent object in Babylon. Recent discoveries have proved how much the religions not only of the East but also of Europe were influenced by Babylon. The ancient world was deeply indebted to Babylon with reference to the arts of civilization and the same may be said with respect to many religious beliefs.

The ancient Babylonians regarded the ocean with the greatest awe. They looked upon it as the very personification of evil and of hell and in the roarings of its waves they seemed to hear the threatenings of the power of darkness. They regarded the sea also as the home and under the dominion of a mighty being, the representation of evil, whom they called Tiamat. This overwhelming power of evil was represented as a mighty serpent or dragon, which appears everywhere in Babylonian mythology, and to which the most awestricken worship was rendered. It was the dragon which is described in the Apocrypha (in the story of Bel and the Dragon) which all the Babylonians worshiped. Another name given by the Babylonians to this mighty sea-divinity was "the huge 7-headed serpent who pounds the waves of the sea," and the monster was also called "the enemy of the gods." In the old Babylonian belief it was this dragon of the sea that seduced the first human beings from their innocence and was the enemy of mankind. The Hebrew prophets continually personify Babylon under the figure of a mighty dragon or serpent of the sea. Isaiah speaking of the destruction of Babylon most exactly describes the vast sea dragon or serpent which was venerated by the Babylonians in the following words: "In that day the Lord with his sore and great and strong sword shall punish Leviathan the piercing serpent, even Leviathan that crooked serpent, and He shall slay the dragon that is in the sea."³¹ No words could more precisely portray than these the awful divinity of the Babylonians dwelling in the depths of the ocean. In another place the same prophet speaks of the dragon being wounded by Jehovah,³² and it is strange to find that there was a "dragon's well" at Jerusalem.³³ Very striking are the words of the prophet Amos in which he declares that there is a great serpent at the bottom of the sea which shall devour the wicked.³⁴ A further link in the chain of evidence is found in the representations of mermaids and mermen in the Babylonian

³¹*Isaiah*, xxvii, 1.

³²*Ibid.*, li, 9.

³³*Nehemiah*, ii, 13.

³⁴*Amos*, ix, 3.

and Assyrian sculptures. The well known figures half human and half fish appear again and again. The Syrian goddess Atargatis was half woman and half fish and appears to have been related to the Dagon of the Old Testament. She is represented (as Derceto) on an engraved stone from Babylon as a genuine mermaid with a woman's body and the tail of a fish and Diodorus Siculus expressly states that Dagon had the head of a woman and the body of a fish. The Phœnicians who dwelt originally in the districts bordering on Babylonia, held in early days beliefs similar to the religion of Babylon and when they migrated into Palestine carried these beliefs with them. From the Phœnicians the worship of the sea-dragon spread into western lands and they may have brought it with them to Britain. The well known worship of the mighty dragon of the ocean by the Chinese and Japanese forms another branch of the subject. It is now held that there were strong connections in the past between ancient Babylonia and the earliest Chinese civilization and these influences may well also have influenced the early religious beliefs of ancient China. It is also striking to discover that a strong resemblance has been traced between the folklore of rural China and that of Cornwall and Brittany. Mr. Dennis who has been zealously studying the folklore of China for a long time has discovered that the Chinese possess a rich treasury of rural legends, myths and superstitions. Some of these are connected in a striking manner with our Cornish legends and, according to this talented writer, a remarkable similarity may be traced between the superstitions of a Chinese town and those of a Cornish village. From this similarity of folklore Mr. Dennis would conclude that there is community of origin between the Cornish and Chinese races. This, however, would refer probably not to the Celtic people of Cornwall, but to the pre-Celtic or Ivernian people, who inhabited our County before the Celts arrived. The worship of the serpent or dragon divinity of the sea both in Cornwall and China certainly forms a strange connection between the two countries.³⁵ The common origin of the civilization of Babylonia and ancient China is now maintained by many leading ethnologists and the relations established between the folklore and mythology of these countries and the serpent worship of ancient Britain is certainly a remarkable discovery.

As to the *race* that in Cornwall looked upon the sea as the home of the mighty serpent-god or dragon-divinity, I do not think the identification can be doubtful. Serpent worship at present exists in Turanian and Hamitic races, and it is amongst the people of these races that the sea is looked upon as symbolising the awful power of darkness and evil. It has been said by one of our best students of folklore that serpent worship was not a Celtic rite. This may be true of Celtic worship originally, but the Celts and other Aryans frequently borrowed the religious rites and notions of those they conquered. The invading Aryans borrowed from the low Turanian aborigines of India their animal and serpent worship, and engrafted these practices upon their purer faith. The Scandinavians adopted the serpent beliefs of the Finnic and Mongolic tribes that they con-

³⁵See *Voyage aux Philippines* by Dr. J. Montano, pp. 7, 8.

quered, and the Semites in ancient Babylonia did the same thing. Similarly it is most probable that the Gaelic Celts who first entered Cornwall or Ireland as well as Western Scotland adopted the worship of the great dragon of the sea into their mythology. I believe that in pre-Celtic days the Iverian or Pictish inhabitants of Cornwall adored two great divinities. The Spirit of Goodness and Light they venerated in the sun, to which they offered sacrifices and practiced ritual observances. This explains the traces of sun-worship and the adoration of fire, which we constantly find in our midst. In addition to the sun our Cornish ancestors adored a spirit of darkness and evil which had its abode in the depths of the ocean, and which they venerated under the form of a mighty sea-serpent or dragon.

While we find this worship best set forth in the myths and legends of ancient Babylonia, it would be a mistake to suppose that our Cornish ancestors imported their worship direct from Babylon. The earliest inhabitants both in western Europe and in Babylonia were of the Turanian or Mongolian race, and they carried the primitive traditions of this race into the lands in which they ultimately settled. The original home of this Turanian race lay to the south of the Caspian Sea, and from this center they wandered in all directions carrying with them their belief in a mighty dragon of evil residing beneath the waters. One branch settled in Babylonia, but another roamed far away northwards and westwards, overrunning Europe and ultimately settling in Britain. These early wanderers in the neolithic age brought the worship of the mighty sea-dragon into Britain, and long afterwards the Gaelic Celts adopted it from their Turanian predecessors in the wilder parts of Our Islands.

This is, I believe, the origin of many of our wild Cornish stories about the terror lurking in the depths of the sea, and it is earnestly to be hoped that these legends and traditions of our western peninsula may be collected and classified before they finally disappear.

D. GATH WHITLEY.

Cornwall, England.



HERBERT FLETCHER DE COU

DOCTOR HERBERT FLETCHER DE COU, a member of Richard Norton's exploring party in the Cyrenaica, was murdered by Arabs while excavating along the antique road near Cyrene on March 11. The party's Turkish guard of 60 men had recently been reduced to 10. But this does not account for De Cou's mishap, since the control of the Turkish authorities in the vilayet of Benghazi is as absolute as they care to make it, at all times. They will probably jail the young scholar's captors at once, with polite apologies to Secretary Knox, and the untoward incident will be officially closed with a platonic inquiry. In a few months the Ottoman governor will release the suspects again, with apologies for the inconvenience he has had to inflict. There

is an "American fort" near Dernah; but it has a century's growth of grass and brush on it. Great Britain has a vice-consul at Benghazi to help the Ottoman government suppress the slave trade. The United States is unrepresented on the Barbary Coast.

Classical scholars who knew De Cou and his scholarly capacities will regret him deeply. He graduated at Michigan in 1888, assisted Charles Waldstein to excavate the Argive Heraion in southern Greece, and has helped him edit the mass of material unearthed there. De Cou was Secretary of the American Schools of Classical Studies at Athens for several years. He knew the conditions of exploration in Greece and Turkey and Egypt well, and combined perfect fearlessness with a singularly gentle temper and address. He spoke Italian easily and Greek with elegance. Nobody possessed a keener knowledge of antique bronzes than Doctor De Cou.

Other countries find larger uses for such talents than ours does. De Cou was out of place at Chicago, where the Art Institute and the Field Museum together own perhaps 190 Egyptian, Greek, Etruscan and Roman bronzes.

Doctor Norton's gallant effort to follow up a British party's surface exploration of Cyrene, anciently the capital of Greek Africa, and environs, opened a splendid field for his talents and experience. According to information the writer obtained from native sources, 24 years ago, there are 30,000 Greek and Roman tombs around Cyrene, 20,000 of which were then still unopened. Smith and Porcher collected some of the British Museum's best things in the Cyrenaica.

Turkish notions of checking foreign espionage have blocked the efforts of scholars to explore the vilayet of Benghazi further. Tourists give it a wide berth. The writer reached Benghazi on a Turkish transport and left it by sailing vessel. Mr. Norton's firman to excavate there was itself a triumph. Tripoli and Benghazi are practically virgin territory. The late Sultan, however, helped to render the Cyrenaica more accessible to explorers by colonizing many Cretan Moslems there, who now maintain a livelier intercourse with Crete and Greece, being Greeks, than the Turkish and Arabic inhabitants could, or cared to. The prosecution of the Archaeological Institute's work at Cyrene, Apollonia, Tokra, Tolmeitah and so forth, can bring nothing but advantage to the country and to science. Its abandonment at this juncture would wear the color of an American surrender, both to native eyes and Turkish.

ALFRED EMERSON.

The Art Institute, Chicago.



NECROPOLIS AT BAHREIN, ON THE PERSIAN GULF.—The *Illustrated London News* not long ago published pictures of the necropolis of Bahrein on the Persian Gulf, where Captain Prideaux has been carrying on excavations for the Indian government. Some of the mounds are as much as 50 ft. high, while the majority range from 20 to 30 ft. There are usually two chambers in each mound, an upper and a lower.



UNIVERSITY OF NEBRASKA EXPLORATIONS OF LONG'S HILL. THE BURIAL MOUND CAN BE DISCERNED ABOVE THE UNMOVED LOESS BACK OF AND ABOVE THE LOWEST FIGURE BY ITS DISTINCTLY DARKER COLOR THAN THAT OF THE UNMOVED LOESS BENEATH.

SCIENTIFIC "INACCURACIES" IN REPORTS AGAINST PROBABILITY OF GEOLOGICAL ANTIQUITY OF REMAINS OF NEBRASKA LOESS MAN CONSIDERED BY ITS DISCOVERER¹

ANTHROPOLOGISTS will remember the conclusions of Dr. Ales Hrdlicka, the eminent assistant curator of anthropology of the United States National Museum in regard to Nebraska Loess Man. Dr. Hrdlicka, after an exhaustive review of the subject says:² "Referring particularly to the Nebraska 'loess man' the mind searches in vain for solid ground on which to base an estimate of more than moderate antiquity for the Gilder mound specimens. The evidence on the whole only strengthens the above conclusion that the existence on this continent of a man of distinctly primitive type and of exceptional geological antiquity has not yet been proved."

Dr. Hrdlicka's paper is so well known that it is unnecessary to reproduce it here.

At the time of the discovery of Nebraska Loess Man, or shortly thereafter, Dr. Henry B. Ward, at that time dean of the medical department of the University of Nebraska, visited the Bureau of Ethnology and acquainted its chief and the members of his staff then in Washington of the fact of the discovery of Loess Man and of the belief of Prof. E. H. Barbour of the Nebraska University that the bones were fossil, that they were post-glacial in time and that the type was primitive. On the return of Dr. Ward he told the writer as well as others that his announcement had been received with incredulity and argument against the possibility of antiquity. This visit of Dr. Ward to Washington was long prior to that of Dr. Hrdlicka to Nebraska.

Dr. Hrdlicka in company with Dr. Ward, Prof. Barbour and the writer visited Long's Hill near Florence, Nebraska, the latter part of January, 1907, at a time when the ground was partially covered with snow and when the faces of the excavation were frozen and any thorough examination was not easy. What is more Dr. Hrdlicka was there but a very short time—hardly half an hour—and made little attempt at accuracy of investigation, apparently ignoring all geological evidence. His work at the excavation seemed hasty and superficial.

In reading Dr. Hrdlicka's report the writer's attention was at once attracted to the many and persistent "inaccuracies" in its pages and I

¹ The following review has been prepared by me after repeated requests that I give my own views upon the matter of the probability of geological antiquity for the remains of Nebraska Loess Man. These requests seem to have placed the burden of proof on the discoverer of these remains as I had carefully refrained from venturing a personal opinion in all papers on the subject until any opinion I advanced could not be placed at the door of inexperience with geological conditions in this section. The review which follows has been prepared wholly with a view of correcting some of the inaccuracies in papers on the subject evidently prepared under circumstances which precluded careful scientific accuracy. For the two eminent gentlemen whose papers are quoted the writer has the warmest friendship. I believe my long-continued labors in this field enable me to discuss the questions involved entirely free from prejudice and with special regard for facts as I have found them.—ROBERT F. GILDER.

² Bulletin No. 33—Bureau American Ethnology—*Skeletal Remains Suggesting or Attributed to Early Man in North America*.

wrote the doctor calling his attention to one of the most glaring, receiving a reply in which he said it was due to hastiness of preparation—although the book was not issued for many months after his visit to Nebraska. No attempt has been made, so far as I am aware to correct any of these “inaccuracies” and the writer believes it devolves upon him to point out at least some of the more noticeable in his work on Nebraska Loess Man.

Page 69 (*Bulletin 33*) second paragraph from the last reads: “. . . The better preserved bones were collected and kept about Mr. Gilder's house until the question of possible geological antiquity of the deeper burials arose when they were transferred to the University of Nebraska at Lincoln.”

The truth is the bones “were transferred to the University of Nebraska at Lincoln” on the advice of Dr. E. C. Henry of Omaha several weeks prior to the conclusion of their “geological antiquity” and they would have been transferred to Lincoln even before were it not for a telegram from New York City requesting that I retain them at my home for the inspection of Prof. Henry F. Osborn who was on his way to Nebraska for that purpose.

On page 75 second paragraph (*Bulletin 33*) is this sentence:

“It was plain, however, at no point had the baking progressed so far as to render the earth impervious to water.”

Dr. Hrdlicka here refers to the “baked clay” area beneath which the primitive bones lay. Reference to a recent paper by the writer* shows the “inaccuracy” of the above quotation. Dr. Hrdlicka did not more than scratch the surface with my heavy grubbing hoe and pickax and could not, at the time of his visit, determine any question concerning the “baking” of the earth. I shall show later that the earth beneath the “baked clay” was decidedly “impervious to water.”

On page 87, paragraph (a), (*Bulletin 33*) Dr. Hrdlicka writes: “Within a depth of 5 ft. or less the Gilder Mound contained the remains of apparently about a dozen bodies. They were male and female skeletons ranging in age from the infant to the senile subject. *Two or three of the skulls, with some accompanying bones, lay within two and one-half feet or less of the surface.*”

In a letter to Dr. Hrdlicka, written at his request, to be incorporated in his paper, the writer made no allusion to finding *human bones* “within two and one-half feet or less of the surface.” The nearest to this will be found on reference to the letter referred to on pages 67–69 *Bulletin 33*, when I referred to finding the skull of a modern Indian child within 3 ft. of the surface of the mound. Again on page 88, second paragraph, second line is another reference to finding bones “two and one-half feet from the surface,” and on the opposite page (89) in the thirteenth line is still another reference while on the same page in the first line of the first paragraph is further reference to “two and one-half feet.” I cannot understand the emphasis and frequency of the use of this very apparent “inaccuracy.”

On page 90, second paragraph, (*Bulletin 33*) Dr. Hrdlicka refers to the condition of the earth in regard to frost at the time of his visit in the

* *Recent Excavations at Long's Hill, American Anthropologist*, Vol. X, No. 1, Jan.–March, 1908, p. 60.



CONDITION OF LONG'S HILL EXCAVATION AT THE TIME OF THE VISIT
OF DR. HRDLICKA

middle of winter—an unusually severe one for Eastern Nebraska. He says: "The fire-hardening at one of the higher levels in the mound was not sufficient to keep out moisture, whose presence facilitates physical and chemical changes in inclosed bones. *At the time of our visit to the locality in January the earth was found to be frozen at a level lower than the baked layer*"—four and one-half feet.

The preceding statement by Dr. Hrdlicka was probably from memory as he made no written notes on the ground. It is true the earth was "frozen at a level lower than the baked layer" because of its exposed vertical surfaces inside the excavation which were deeper than the fired layer and were acted upon by frost the same as was the surface or horizontal exposure. But instead of there being 3 or 4 or more vertical feet of frost in the ground—as Dr. Hrdlicka conveys—there was less than 8 in. Accompanied by two assistants the Sunday following Dr. Hrdlicka's visit I made an excavation 90 ft. north of Long's Hill mound and found no frost below 7 in. from the horizontal surface. After a residence in Eastern Nebraska of over 20 years I can state that at no time has the leaf-covered wooded section in this vicinity been visited with cold so intense as to freeze the ground to a depth of 4 ft. The winter of 1909-10, probably the most severe of recent years, did not freeze the ground over 12 in. For several years past I have been persistent in archaeological field research—winter as well as summer—with no intermission and during that time have encountered little difficulty from frozen ground.⁴

⁴ An illustration showing that the forest section in the vicinity of Omaha in which Long's Hill lies is not acted upon by frost as might be supposed from Dr. Hrdlicka's statement will be found in the following record of the first week in January, 1911. January 1 the Omaha weather bureau station recorded a

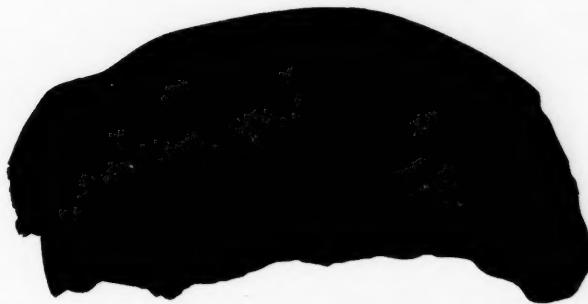
On pages 92 and 93 (*Bulletin 33*) Dr. Hrdlicka refers to *Starr's Summary of the Archaeology of Iowa* in an effort to show that burials similar to the burial on Long's Hill are common in its general neighborhood. A careful perusal of these references will show conditions altogether differing from those of the ancient bone bed at Long's Hill with the single exception that human bones were found in the mounds under consideration. In no place has Mr. Webster, the writer quoted in Dr. Hrdlicka's paper, shown a burial with earth covering like the Loess Man. The type of burial he described is quite common in Eastern Nebraska and Western Iowa and the burial mound on Long's Hill where fire had been used upon the embers of which had been deposited human bones was similar to other burials in the Missouri Valley on both sides of the river. Reference to the writer's paper on *Recent Excavations at Long's Hill*, will show that the fire of the baked clay area *had charred some of the bones which had been laid upon it* and must have been used by the persons who erected a burial mound upon the hilltop and had no connection with the bones of the primitive type which lay beneath the surface of the hill.

Many tumuli in this section show quite plainly similar construction to that on Long's Hill. In close proximity to them can be found sometimes deep at other times shallow depressions from whence was taken the earth with which to erect the burial mound, where excavation has proven the surface of the hill was used as a depository for mortuary remains and that the neighboring earth was piled above. Long's Hill burial mound is no exception to this rule.

Had acceptance been made to the invitation extended by the Omaha Commercial Club addressed to scientific societies, museums and universities the summer of 1909, Long's Hill might have been cross-sectioned and all controversy settled, but the owner of the property has forbidden further excavation there. The burial area on the hill is about 100 ft. north and south by 50 ft. east and west. Almost anywhere in its slight elevation skeleton material similar to that from the two "higher levels" in the original excavation can be found even to-day. Almost continual exploration of the burial mounds skirting the Missouri river has been kept up by the writer for 7 years. Burials similar to the mound burial at Long's Hill are common. Intrusive burials in old mounds are frequently met with. One large mound in the exploration of which a considerable force of volunteers was used and many days were spent, located on the southwest corner of Thirteenth Street and Missouri Avenue, South Omaha, Nebraska, showed 7 strata of calcined human bones with other strata of partially burned earth.

temperature of 5 degrees below zero at 5 o'clock p.m. At midnight street thermometers recorded a temperature of 11 degrees below zero. Monday the average temperature for the day was 8 below zero. At 9 p.m. it had dropped to 14 below as recorded by the local weather bureau station. Street thermometers recorded 17 below zero at 5 o'clock Tuesday morning while in the country adjacent to Omaha, unprotected by buildings 20 below zero was recorded at the same hour. Tuesday afternoon the weather moderated and continued to moderate until and including Sunday, January 8 although ice formed each night.

Unprotected hills, valleys and bench lands adjacent to Omaha showed a frost depth Sunday, January 8, of 10 inches, but in the forest areas, protected by leaf mold no frost was found and excavation labor was continued by me without hindrance from frost. Thus it is shown that frost does not penetrate to any great depth in the protected forest section adjacent to Omaha and frost which could have reached anywhere near the bones of Loess Man is not of record in the temperatures of this vicinity.



NEBRASKA LOESS MAN NO. 5, SHOWING IN PROFILE HEAVY SUPRAORBITAL RIDGES AND RETREATING FOREHEAD



NEBRASKA LOESS MAN NO. 5, TOP VIEW

At the bottom of the mound, which proved to be the original surface of the hill, a remarkable piece of pottery was found showing 7 different designs near the rim.

"Fire burials" are the rule and not the exception in the vicinity of Omaha. Space will not permit of a detailed description of Mounds Nos. 1 to 26 explored during the past three years. It is sufficient to say that none of them showed features similar to the deposition of Loess Man, although results from an archaeological point have been satisfactory.

That there were human remains under the mound burial at Long's Hill, as Prof. Barbour says, was purely accidental, and this can be more readily understood when it is known that there is scarce 100 ft. along the higher river bluffs devoid of burials. In some cases they are every 50 ft. and sometimes even less, and they so continue for miles on both sides of the Missouri river. Dr. Hrdlicka lays great weight upon the fact that other burials were found in the vicinity of Long's Hill, but the writer knows it to be a fact that the bluffs on both sides of the river are practically one continuous aboriginal "graveyard" for scores of miles and finding other human bones in the neighborhood of Long's Hill has no weight in determining the method of deposition of Loess Man bones.

In the month of May, 1910, I visited the splendid archaeological treasures in the museum of the Davenport Academy of Sciences and, through the courtesy of its curator, Prof. J. H. Paarmann, and his assistant, Miss Sheldon, I was permitted to examine the numerous Mound Builder skulls in the museum and particularly skulls figured in *Bulletin 33* as Plate XII, facing page 94—No. 4402, Illinois Mound Builder—and Plate XIII, No. 4401. To anyone with knowledge of Indian types these two skulls—both remarkable specimens—are plainly Indian. In profile they show heavy supraorbital ridges and low, retreating foreheads, *but in each skull, showing in profile these peculiarities the view from directly in front shows that the heavy portion of the supraorbital ridge extends only over about three-fifths of the orbital arch*—a common characteristic in Indian crania, (according to Dr. Hrdlicka) differing markedly from Loess Man whose ridges are pronouncedly heavy throughout their entire arch, showing this exaggerated ape-like characteristic to a degree truly remarkable.

In the Davenport museum, replete as it is with fine Indian and Mound Builder crania, there is not one specimen which has the uniformly heavy supraorbital ridges of Loess Man. Dr. Hrdlicka writes on page 100 (*Bulletin 33*), first paragraph: "The whole subject of exceptionally large supraorbital arches and low foreheads deserves exhaustive anatomical study." He does not associate either or both features with primitive man. He says they are quite common features in many of the skulls forming the large collection in the National museum.

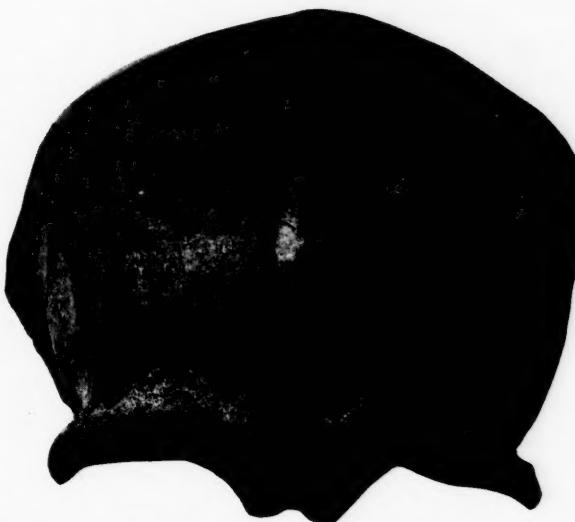
In the writer's own collection is the skull of an Indian found associated with objects of white man's make, showing a comparatively recent burial, which has a more retreating forehead than any skull featured in Dr. Hrdlicka's paper and in profile quite heavy supraorbital ridges. In front view, however, the ridges over the orbital cavities are no heavier than any European crania.

On page 90 (b) (*Bulletin 33*) Dr. Hrdlicka writes: "This brings us directly to the very important concurrent fact of the total absence from any of the bones of perceptible fossilization. Such a condition would be hard to explain in bones dating from the period of the original loess . . ."

Does Dr. Hrdlicka admit great geological age for the "original loess" deposit? Prof. Bohumil Shimek's theory of the loess is that it is quite recent, in fact is still forming, that it is aeolian in character and he is positive that the loess of Long's Hill is "recent."



NEBRASKA LOESS MAN NO. 3, SHOWING HEAVY SUPRAORBITAL RIDGES



NEBRASKA LOESS MAN NO. 6, SHOWING HEAVY SUPRAORBITAL RIDGES

Both Dr. Hrdlicka and Prof. Shimek argue against the geological antiquity of Loess Man bones, but they appear to differ upon one essential point—the antiquity of the hill. One argues the recentness of the bones because of the age of the hill in which they were found and lack of "fossilization," and the other because the hill has been formed in recent years. But both seem sure the bones are not as old as has been claimed they are, but they appear widely separated on the geological feature. Prof. Shimek believes the wind increases the growth of the loess far more rapidly than erosion decreases it.

Prof. Barbour found mineral matter had displaced the organic matter in several portions of Loess Man bones when attempting to grind a micro-

scopic section in his laboratory in Lincoln and bits of bones in the writer's possession from Long's Hill have been found to contain mineral matter, and later evidence tends to disprove the statement that there was no trace of fossilization in any of Loess Man bones.

Page 90, paragraph (c) (*Bulletin 33*) reads: "Numerous bones from the different levels show marks due to the gnawing of rodents and also cuts made by some sharp implement wielded by *human hands*." Again, on page 91, paragraph (d) (*Bulletin 33*) reads: "The presence of *knife* marks on a number of the bones has important bearing on the question of relationship of the bones of the different layers to one another."

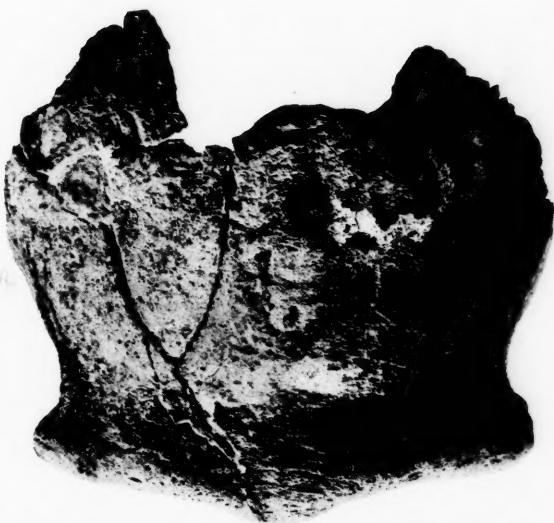
The so-called "knife marks" described by Dr. Hrdlicka may be knife marks, but the writer has good reason to believe they were not made with a knife or "a sharp implement wielded by human hands." Under a hand lens they look even less like the marks of a flint blade, which, I take it, is the idea Dr. Hrdlicka would convey. In my possession are scores of cuttings on bone with flint blades and other scores of bones showing the cuts made by wolves' and rodents' teeth and claws which very closely resemble those on Loess Man bones.

In the possession of Mr. Charles Lamb of Mondamin, Harrison County, Iowa, is a portion of a femur of a mammoth, mastodon or elephant, thoroughly "fossilized," found in the neighborhood of Mr. Lamb's home, which shows innumerable marks many of which are precisely similar to those on some of the bones from Long's Hill described by Dr. Hrdlicka as "knife marks" or "some sharp implement wielded by human hands." Surely if these marks were made by "an implement wielded by human hands" then the marks on the fossil bone in possession of Mr. Lamb were so made, but no claim has yet been advanced by the writer that man and mastodon were contemporary in the Missouri valley.

That human and other bones in the loess protected as were the primitive osseous remains under the Indian burial at Long's Hill will preserve their organic matter for ages with little change I have fully determined by finding many specimens under circumstances similar to the bones of Loess Man.

The precipitation of moisture in this vicinity is scarce one-half that in the Atlantic states. It is much less than that in the Ohio valley and as all of the more ancient burials in Eastern Nebraska were made upon the high, well drained ridges skirting the river valleys the bones are naturally well protected. My opinion as regards the various "layers" of bones on and in Long's Hill, based upon a great amount of careful labor in this section—all of which has been performed personally—is that a burial had been made on the crest of the hill without excavation of any kind and in the manner following:

First a great fire had been made on the hilltop and when the brands had been reduced to ashes human bones had been laid in bundles and at full length upon the embers, some of which had also been spread over the bones. Next a covering of earth to a depth of five or more feet had been placed over the remains. At a much more recent date an intrusive burial of a child had been made in the top of the mound the grave for which had

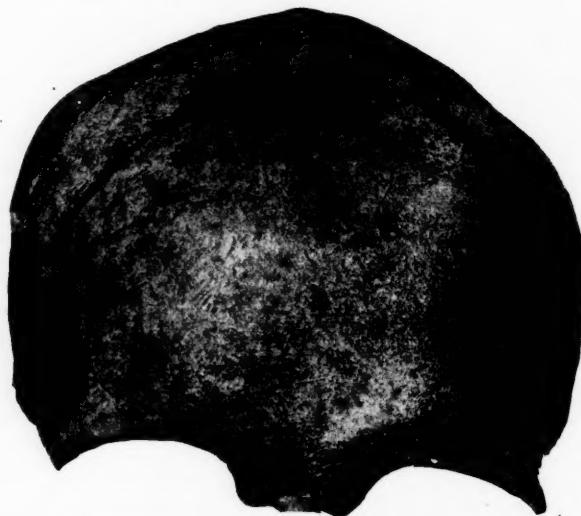


FRONTAL BONE, SHOWING THICK PROTRUDING BROWS AND RETREATING FOREHEAD WITHOUT FRONTAL EMINENCES. SKULL NO. 8



FRONT VIEW OF NEBRASKA LOESS MAN, SKULL NO. 8, SHOWING PRONOUNCED AND HEAVY SUPRAORBITAL RIDGES

been excavated three or more feet, which disturbed in a measure, more or less, the original burial. I cannot hold as tenable the theory—for theory alone has been advanced by those who argue against the antiquity of Loess Man—that the people who made the two burials had knowledge of the existence of other human bones beneath their mortuary fires. From time to time other burials were made upon the hilltop after the manner prevailing among those early Nebraskans until today they can be found at almost any point an excavation is made.



MOUND-BUILDER SKULL SHOWING CHARACTERISTIC INDIAN SUPRAORBITAL RIDGES, DIFFERING FROM THOSE OF NEBRASKA LOESS MAN

In the original manuscript of my paper on *Recent Excavations at Long's Hill* was an account of one of my examinations of the earth immediately above and in contact with Loess Man bones giving the results of a comparison of it and a cube of the same size and from the same depth taken from a point of the hill 50 ft. south of the excavation where there was no evidence of disturbance by man. This comparison showed no difference in soil construction or color of the two cubes—neither had been disturbed so far as I was able to discover. Unfortunately the paper in its original form was too long for the space allotted to it and having given the editor permission to cut out what he deemed best this comparison was eliminated.

My archaeological studies in this neighborhood have been in the main in the ruins of certain aboriginal houses. Beneath the floors of the houses are numerous caches. Nearly all of these caches show that their openings have been filled with earth and that fire had been kindled over the earth filling. Whether this was done in order to conceal the existence of the cache—a procedure frequently resorted to by early white explorers and hunters in the west—or to prevent moisture from getting at its contents is a question. In some instances the walls of the cache show they

have been subjected to burning so that a surface impervious to the percolation of moisture into the cache has resulted and a large number and variety of bone implements stored therein are found to be in almost perfect condition. The articles left in the cache are frequently covered by wood ashes—long used by pioneers as a preservative for various perishable articles. Wherever fire remains over the cache opening are not evident the bone implements in the receptacle are in very imperfect condition and



TYPE OF MOUND-BUILDER CRANIA, FIGURED EXTENSIVELY IN DOCTOR HRDLICKA'S PAPER

It shows a characteristic low forehead, and what appear in profile to be very heavy supraorbital ridges. From directly in front the ridges over the orbital cavities are no heavier than typical Indian skulls and can in no way be compared to the pronouncedly heavy supraorbital ridges in Loess Man. The photograph is taken from a skull in the collection of the author.

show the effects of contact with moisture. When it is remembered that at the present day these ruins are from 4 ft. to 9 ft. deep and would naturally conserve the moisture from melting snow and rain, it can be readily understood that only the burning or baking of the loess prevented moisture finding its way into the cache. Even after snows lasting three months like those of the winter of 1909-10 I have found the cache beneath the "baked clay" or loess to be as dry as my laboratory floor.

What is true of the baking of the earth over the entrance to the cache is true of the "baked clay" area of Long's Hill, but in the latter case the fire was made and the preserving ashes supplied by the people who chose a sightly eminence upon which to bury their dead who had no reason to suspect there were other human bones beneath those over which they erected their mound.

Prof. Bohemil Shimek of the chair of botany, University of Iowa, who has devoted 30 years to a study of the deposition of the loess, admits in keeping with his æolian theory that Loess Man bones might have been covered by sand blown from the river bars. Prof. Shimek scouts the glacial character of the loess. His research has been of considerable extent and his theory has many adherents. Prof. Shimek has carefully examined the loess at Long's Hill, in order to determine its depth and general characteristics. I quite agree with him upon one material point—that of never having found fresh water shells disassociated from human activities in the loess along the Missouri river. In his conclusions Prof. Shimek says: "The human remains in question were not in undisturbed loess and hence are not fossils.

"These remains present no evidence of the existence of man in the glacial period, for not only are they not in undisturbed loess, but loess itself is not glacial."

At the time of Prof. Shimek's first visit to Long's Hill the area in which Loess Man material was found had been excavated and thoroughly sifted and only a part of the mound burial, which extends some distance further north, could be examined *in situ*. When he made his examination an area 25 ft. in circular diameter had been worked over many times and an examination of any part of the ancient bone bed was out of the question.

In the first paragraph of his summary Prof. Shimek admits the "mound" was ordinary, but "of interest because it contains *two* layers of human remains." This statement is true. The mound burial above the remains of Loess Man contained two layers of human remains and had no relation to the older human remains beneath it.

On the north perpendicular exposure of the excavation at Long's Hill Prof. Shimek noted several old root and gopher holes encountered also by the writer, but they were several feet from the bones of Loess Man. Even where they occurred they were not sufficiently large to admit the passage of human skulls or the longer bones of the skeleton and they ran off sometimes at acute angles. The writer's experience with gophers, which I speak of here because it has been advanced that these animals may have carried bones from the mound burial down into the hill, is that these little animals invariably carry foreign substances such as bits of shell, stones and bones *upward*, and I have found this fact of great assistance in determining the contents of a mound before exploration had begun. Archaeologists whose work has carried them into Wyoming will remember the habits of ants in piling Indian trade beads upon their hills, and it may be gophers had the same "reason" for depositing objects they encountered at the top of their burrows.

Page 251 of Prof. Shimek's paper⁵ contains a chapter on *Burial Habits of the Mound Builders* from which the author quotes a description of a burial mound at Lake Okoboji, Iowa, which shows at least 6 burials or layers of bones in one mound. Prof. Shimek thinks this a parallel case to the mound burial at Long's Hill and he has discussed it with the writer on

⁵ *Nebraska Loess Man*—Bulletin of the Geological Society of America, Vol. 19, Published by the Society, Oct. 1908—Shimek.

several occasions, but to my mind the comparison applies only to the mound burial there and not to the older bones beneath the surface of the hill.

The Wallace Mound, described in a recent paper by the writer,⁶ contained at least three layers of human bones placed similarly to those in the Lake Okoboji Mound.

Whether the bones of Loess Man were laid by human hands, covered by silt from glacial waters or by sand blown from the river bars may be a question, but that the bones were found in the undisturbed loess formation I believe has been proved.

ROBERT F. GILDER.

Omaha, Nebraska, January, 1911.



HOARD OF BRONZE IMPLEMENTS ON A SCOTCH ISLAND.

At a meeting of the Society of Antiquaries of Scotland on December 12, 1910, Doctor Joseph Anderson described a hoard of bronze implements and beads of glass, gold and amber recently discovered at Adabrock, on the island of Lewis. The hoard, found by a man digging peat, consisted of 2 axes, a gouge, a spearhead, 3 razor-blades (all of bronze), a double conical bead of gold, 2 amber beads, a greenish glass bead with whitish spots, 2 polishing stones or whetstones. All seemed to have been contained in a vessel of thin bronze of which only a portion of the rim and of the side toward the bottom remained. This hoard appears to have been deposited by a private individual. The fact that there are 3 razor-blades is paralleled by 3 found near Dunbar. These are from the Bronze Age, some few centuries B. C.

ROMAN CIST AT LINCOLN, ENGLAND.—Early in January interesting Roman discoveries were made at Lincoln. Workmen while leveling a field turned up a Roman urn of grey ware, 7 in. high and 5 in. across the rim. The decoration was peculiar; evidently rough clay had been fixed to the outside and drawn over the urn with the fingers, leaving a scaly sort of design. The urn was filled with dirt. Close by some large stones were dug up, one of which attracted attention. It is 2 ft. long, 18 in. wide and 12 in. thick. Mr. A. Smith, Curator of the Lincoln County Museum, inspected the object which appeared to be simply a rough square stone, except for a fillet along the sides. The Curator, however, requested that it be dug out so that he might see if there were any inscription. While the workmen were pulling up the stone, an almost square portion, 3 in. thick, slipped off, revealing the fact that the stone was a cist containing cremated remains, placed in a circular cavity 10 in. across. Among the burnt bones and earth were found two small glass vessels, usually called tear-bottles, which brand the burial as of Roman date. No inscription has been found.

⁶*Excavations of Earth Lodge Ruins in Eastern Nebraska*, American Anthropologist, Vol. II, No. 1, January-March, 1909.



TWO VIEWS OF PAPYRUS A FOUND AT ASSUAN. SHOWS STRINGS AND CLAY SEAL

THE LONG HIDDEN TREASURES OF ELEPHANTINÉ

WHETHER the ancient Nubians and Egyptians believed that at the First Cataract of the Nile, where their frontiers came together, there was a chain stretched across to restrain the annual overflow, with Chnûb, the god of the Cataract, on the east holding one end, and his wife, Sati, on the west holding the other end of the chain, may be left to Egyptologists to decide. Now, however, we know that a great dam has been stretched across to regulate the overflow, and, also, that in the V century B.C., Chnûb, the ram-headed god of the Cataract, was worshipped at Assuan, on the eastern shore, and Sati, at Elephantiné across the channel. This last has been made plain by the remarkable papyri discovered within a few years past in the island which is so graphically described in *A Thousand Miles up the Nile*, by the distinguished traveler and archæologist, Amelia B. Edwards, as follows:

"The green isle of Elephantiné, which is about a mile in length, lies opposite Assuan, and divides the Nile into two channels. The Lybian and Arabian deserts—smooth amber sand-slopes on the one hand; ragged granite cliffs on the other—come down to the brink on either side. On the Lybian side a Sheyk's tomb, on the Arabian shore, a bold fragment of Moorish architecture with ruined arches open to the sky, crown two opposing heights, and keep watch over the gate of the Cataract. Just under the Moorish ruin, and separated from the river by a slip of sandy beach, lies Assuan." Just across the eastern channel of the Nile below the First Cataract at which the line between Egypt and Nubia crosses it, on the southern end of the island of Elephantiné was made the discovery of documents of great interest, some of which were written before the time when Ezra and Nehemiah were leading the Jews back from the captivity and rebuilding the walls of Jerusalem, and some others, during the generation following the work of these two remarkable men at the Holy City.

The traveler and archæologist from whose facile pen a quotation has just been made, pictures to us the site of the discovery thus:

"It is a very beautiful island—rugged and lofty to the south; low and fertile to the north, with an exquisitely varied coast line full of wooded creeks and miniature beaches, in which one might expect at any moment to meet Robinson Crusoe with his goat-skin umbrella, or man Friday bending under a load of faggots. They are all Fridays here, however, for Elephantiné being the first Nubian outpost, is peopled by Nubians only. It contains two Nubian villages, and the mounds of a very ancient city which

was the capital of all Egypt under the Pharaohs of the VI dynasty, between three and four thousand years before Christ."

The lower part of the island, fringed with palm trees, is devoted to the cultivation of the castor oil plant and other crops. Miss Edwards also tells us of two royal palaces which in the days of the early dynasties occupied a part of the island; but she did not tell of the fortress which stood on the southern promontory of the island, and its twin fortress at Assuan, in which garrisons were stationed to guard the frontier in the time of Ezra and Nehemiah, and, indeed, long before. The documents discovered on the spot have made this clear.

Continuing she tells us:

"We picked up several bits of inscribed terra cotta—evidently fragments of vases—and brought away some three or four as souvenirs of the place, and thought no more about them.



ISLAND OF ELEPHANTINÉ

"We little dreamed that Dr. Birch, in his cheerless official room at the British Museum, was at this very time deciphering a collection of similar fragments, nearly all of which had been brought from this very spot."

If she had even dreamed of what was concealed there, to be unearthed in the early days of the XX century, she would hardly have said of Elephantiné that:

"The ruined gateway of Alexander and the battered statue of Meneph-tah are the only objects of archaeological interest in the island."

Having no claims to being an archaeologist, I will tell of these discoveries chiefly in the words of Professor Sayce, who has ably edited the documents discovered in 1904 at Elephantiné; and in quotations from Professor Gunkel's account of the most interesting of all discovered by Doctor Rubensohn in 1907 and in the words of the documents themselves, translated by A. E. Cowley and Mary Gurney.

Professor Sayce begins his *Introduction* to the folio containing the 10 Aramaic documents put into his hands by Mr. Mond¹ by referring to some less considerable discoveries at Elephantinè. An examination of this very learned work, in which Mr. A. E. Cowley did the deciphering and translating of the Aramaic, and the documents which were photographed under the superintendence of Mr. Howard Carter, Inspector to the Service of Antiquities in Egypt, shows that no care was spared to make the most perfect presentation of these interesting finds. The documents as photographed are seen to be in clear large script, inclining to cursive, and are probably as easy to read as the papyri themselves. As Professor Sayce tells us, there are no distinctive forms for final letters such as we have in our Hebrew Bibles, which represent manuscripts later than these papyri by at least 15 centuries.

PLACE OF DISCOVERY

The folio of Professors Sayce and Cowley indicates in its title² that the papyri were discovered at Assuan; but it seems quite certain that, as Professor Gunkel says, they were discovered at Elephantinè; and were then carried across to Assuan for sale. Indeed, Professor Sayce says: "We were assured that they had been really discovered in the island of Elephantinè the actual spot from which they had come was pointed out to us." Yet he doubted, as now appears, without reason. He continues:

"The find was such as had never been made before. The Papyri were in practically perfect condition, the very strings which had been tied round them were intact, and the clay seals which fastened the strings to the papyri were unbroken."

"For the first time, the Aramaic scholar has at his disposal a series of connected and fairly lengthy documents, clearly written and but little injured, and furnished with exact dates."

The exactness of the dates is secured by the dating of these deeds and other business papers with the year of the Persian sovereign and the days of the Persian months and of the Egyptian also.

JEWISH RELIGION TOLERATED

"There was no religious intolerance. The Jewish oath by Jahû was as valid in the courts of law as the oath by Sati." Sati was the Egyptian goddess of Elephantinè.

A JEWISH COURT

"The Jews had their own court—the tribunal of the Hebrews—which was recognized by the law quite as fully as any of the other courts of the country, Egyptian or Persian."

¹Robert Mond, M. A., F. R. S. E., Hon. Secretary of Davy-Faraday Research Laboratory of the Royal Institution.

²Aramaic papyri discovered at Assuan.



FIRST CATARACT OF THE NILE AT ASSUAN BEFORE THE DAM WAS BUILT
UNDER PERSIAN LAW

"The law under which the Jews of Elephantinē lived in common with their neighbors was that of Persia. Apart from 'the Tribunal of the Jews,' there is nothing to show that they were subject to any code of laws of their own or to local laws of Egypt. The conveyance of property is couched in the technical terms of Babylonian law, from which the law of Western Asia derived its origin, and the deeds which relate to it are drawn up in the form made familiar to us by the legal documents of Babylonia."

TESTAMENTARY POWER

A Jew who owned property "could will it to whom he would, and determine the succession to it after his death."

WOMEN'S RIGHTS

In this respect (the right to devise by will) the woman was on an equal footing with the man. She too, could hold property and leave it by will as she wished. "We learn that the woman had the same right as the man to pronounce a sentence of divorce; but in each case it was only valid if pronounced in a public 'assembly.'"

RACES IN THE ISLAND

"The mixture of names in the deeds is of considerable interest." They were found to be Jewish, Egyptian, Persian, Syrian, Babylonian, Berber and perhaps others.

Professor Sayce tells us that a new light is thrown by these documents "on the history and character of the Aramaic language, as it was spoken and written in the Western provinces of the Persian empire in the V century B. C.; new words and meanings are added to the Aramaic Dictionary,

and new forms or idioms to Aramaic grammar, while the origin of the Biblical Chaldee is at length explained to us."

It may be added that while, of the persons mentioned in these deeds twenty-six, if not more, bear Bible names, the documents discovered about three years later at Elephantine introduce the names of persons mentioned in the Bible, who were contemporaries of Ezra and Nehemiah, one of whom was still living when the papyri were written, while an appeal is made to the sons of another, who had probably died. Sanballat, the chief enemy of Nehemiah and his people, is represented in the papyri by "the sons of Sanballat, the governor of Samaria," and Jehohanan, mentioned in Nehemiah xii: 22, 23, is appealed to as "Jehohanan, the high priest at Jerusalem."

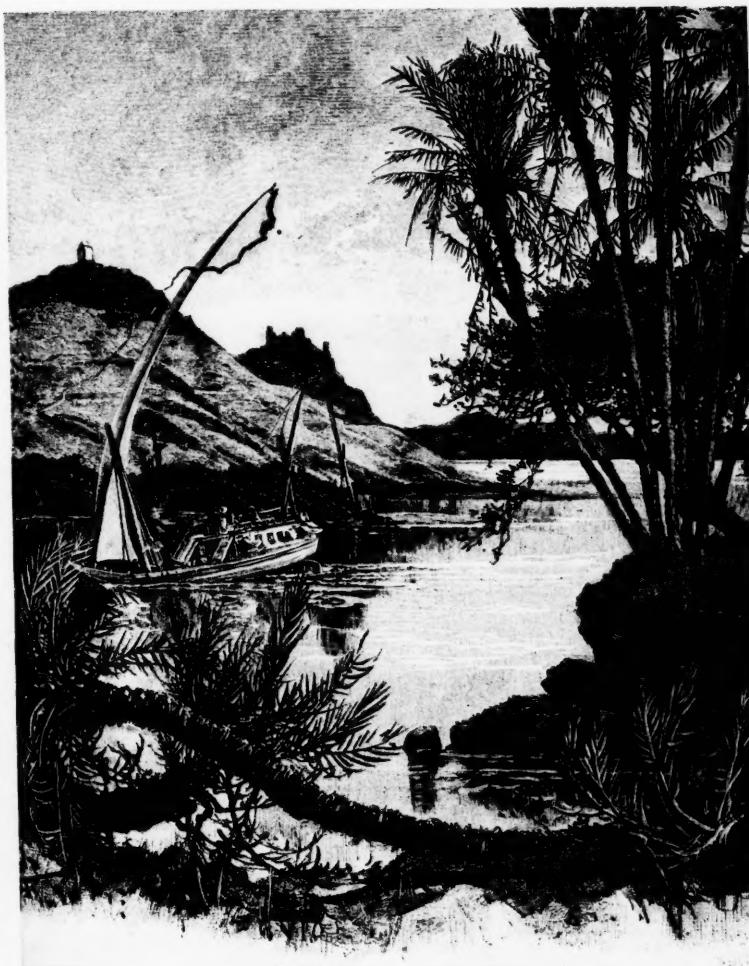
The discovery of this last roll of papyri was made by Rubensohn of the German expedition, in the same mounds on Elephantine in 1907 where the 10 already mentioned had been found in 1904. The clue as to the locality was gained by the finding of the Egyptian word for ivory, "Jb" on a long strip of papyrus published by Euting in 1903. The island was named Jb or Jeb (now Elephantine), because it was formerly a depot for elephants' tusks brought from the more southerly regions of Africa. The island is called Jeb in the papyri.

Doctor Herman Gunkel, writing of the last discovery by Rubensohn in 1907, in the *Deutsche Rundschau*, Berlin, and referring to the former discoveries, says: "All this, however, is cast into the shade by the papyrus lately discovered by Doctor Rubensohn, and now placed in the Berlin Museum. . . . Two copies have been found, one incomplete. A third and fourth portion also refer to the same event. . . . All these papyri belong to the same period, as is shown by dates and names, and they explain one another." The roll was taken to the Berlin Museum with the seals unbroken. A description of them is found in the *Expositor* for January, 1911, in Gunkel's article translated by Mary Gurney.

A few extracts from the papyri found in 1907, and described in this article will now be given. The very first words of the earliest temple document are not without significance: "To our lord Bagohi, ruler of Juda, thy servant Jedonja,³ with his colleagues, the priests in the fortress of Jeb." Here we find the high priest of the temple mentioned in the papyri first discovered, with assistant priests, appealing to the Persian governor of the province of Judea—Bagohi⁴ whom Josephus mistakenly, as has long been thought and is now proven by the papyri, placed about 75 years after his real date, leading many critics to place Ezra and Nehemiah long after their time. The papyrus written in the 17th year of the reign of Darius II, (424-405, B.C.) is addressed to Bagohi "the governor of Juda." Josephus represents Bagoas (*Antiquities*, xi:7) as under Artaxerxes Mnemon, and Sanballat as "sent into Samaria" by "Darius, the last king of Persia." Sanballat is represented as the contemporary of Jaddua, the high priest who (Josephus says) went out to meet Alexander the Great when he was approaching Jerusalem in 331 B.C. But Nehemiah mentions him in 446 B.C., 115 years earlier, and these papyri mention his sons in 408 B.C. The

³ or Jedonja.

⁴ Persian, Bagoas—the Bogoses of Josephus.



VIEW ON THE ISLAND OF ELEPHANTINÉ, WHERE NUMEROUS INSCRIBED
POTSHERDS ARE FREQUENTLY FOUND

critics referred to preferred to follow Josephus rather than Nehemiah. Since the discovery of this papyrus the mistake of Josephus is made evident, and the period of Ezra, Nehemiah and Sanballat is fixed with absolute certainty.

The occasion of the appeal to Bagohi was the destruction of their temple which had so long stood within the fortress on Elephantiné. Gunkel supposes that the Jews there were descendants of Jewish soldiers who had been stationed in the fortress as a garrison some centuries before this time. As will be seen, the temple to Jahû (Jehovah) was erected before the advent of Cambyses, and some think the Jews were there even as early as the

VIII century before Christ. At any rate, the fathers and grandfathers and great grandfathers of these Jews had worshiped here since the erection of the temple "in the days of the Egyptian Kings." It seems that there was a temple of Chnûb, the god of the cataract, just across at Assuan, (or Sewêñ,⁵ as it seems to have been called at the time the letters were written). The chief priest at Elephantinê, Jedonjâ, tells Bagohî a pitiful story. It seems that one Waidrang was bribed by the priests of Chnûb to bring about the destruction of the Jews' time-honored temple.

"Thereupon, this cursed Waidrang sent a letter to his son, Nephâjân, who was ruler of the fortress of Sewêñ, saying that the temple in the fortress of Jeb must be destroyed."

"Then Nephâjân, brought Egyptian and other troops, and having weapons, entered the fortress of Jeb, pressed into the temple and razed it to the ground." "They broke the stone pillars which were there; they also destroyed the 5 gateways hewn out of stone, which were in the temple, and the doors with bronze hinges, the roof entirely constructed of cedar beams and the remaining furniture they burned with fire. The golden and silver vessels for sprinkling and the utensils of the temple they carried away and appropriated."

"In the days of the kings of Egypt our fathers had built this temple in the fortress of Jeb. When Cambyses conquered Egypt, he found this temple already built. He destroyed the temples of the gods of the Egyptians, but this temple was not injured."

Care is taken to state to the Persian official that Arsames, the Persian satrap of Egypt, was not to blame for the outrage, as he was absent from Egypt at the time.

Jedonjâ continues: "After the deeds of Waidrang and the priests of Chnûb, we wore sackcloth, with our wives and children, and we fasted and prayed to Jahû, the Lord of Heaven."

It seems that immediately after the destruction of their temple in 411 B.C., Jedonjâ and his colleagues sent a letter to the high priest at Jerusalem. For, in now appealing to the Persian governor at Jerusalem, we find them saying: "At the time this misfortune happened to us, we sent a writing to our lords and also to Jehohanan,⁶ the High Priest, with his colleagues, the priests of Jerusalem, to Ostan, the brother of Anani and to the nobles of the Jews; but they returned no letter to us." He describes their grief: "We have worn sackcloth and have fasted since Tammuz day of the 14th year of King Darius unto this day; our wives have become like widows we have not anointed ourselves with oil, and we have drunk no wine. Also until this day of the 17th year of King Darius, no meal offering, no offering of frankincense or burnt offering has been brought to the temple."

"Thy servants now speak, Jehonjâ with his companions, and the Jews—all citizens of Jeb. If it appear right unto my lord, have regard to this temple to rebuild it."

"Behold us here in Egypt who have received thy benefits and favors. We pray thee to send a letter unto thy servants concerning the temple of

⁵The Syene of the Greeks. The place to which Juvenal was banished.

⁶Mentioned in Nehemiah xii: 22, 23. (R. V.)

the God Jahû, that it may be rebuilt in the fortress of Jeb as it was before. Then will we offer meal offerings, etc."

"And with our wives and children. . . . will pray for thee if this be so [done] until the rebuilding of the temple." (See a similar promise in Ezra vi:10.) "All these things we have notified in our own letter to Delâjâ and Shelemâjâ the sons of Sanballat the ruler of Samaria."

So we find the sons of Sanballat mentioned in this writing of November 408 B.C., and also Jehohanan, the high priest of Jerusalem, and turning to the book of Nehemiah we find much about Sanballat himself, the enemy



PORTION OF PAPYRUS K FOUND AT ASSUAN

of the Jews and the opposer of Nehemiah. We also find (Nehemiah xii: 11) Jehoiada a high priest under Nehemiah's administration, and Jehohanan, his son named as next after him in the line of high priests—evidently the same to whom this letter states that a letter had been written 3 years before.

The appeal to Jehohanan, the high priest at Jerusalem, was not answered. This high priest's brother Manasseh had been driven from Jerusalem by Nehemiah because he had married the daughter of Sanballat, the enemy of the Jews, (Nehemiah xiii: 28). He is credited with the building of the rival temple of the Samaritans, to whom he had gone. It is not very strange, if this was so, that his brother Jehohanan, and the leaders at Jeru-

salem, were unwilling to assist in rebuilding a temple in Egypt which they would probably consider another rival place of worship. So, as we have seen, these priests at Elephantiné, after waiting 3 years, turned to the gentiles for help. As Cyrus had ordered the rebuilding of the temple at Jerusalem and Darius had ordered the work which had been arrested by the opposition of the neighboring Persian pashas, to be resumed and forwarded, when the decree of Cyrus was discovered in "the house of the rolls" at Ecbatana, (Ezra vi.), it was hoped that the Persian king might be influenced by Bagoas to help in this extremity. They promise in return, it seems from the document, to pay, (probably from the revenues of the rebuilt temple,) more than a million dollars in silver (1,000 talents of silver). It is added: "As for the gold we have sent our message and communication. . . . All these things we have notified in our own letter to Delâjâ and Shelemjâ, the sons of Sanballat, the ruler of Samaria."

Professor Gunkel tells us of "a leaf, subsequently discovered," which he considers "a protocol" on the reports of Bagohî and Delâjâ, (Sanballat's elder son) in which these remarkable words are found: "It is for thee to command in Egypt, before Arsham, concerning the Altar-House of the God of Heaven, which was built in the fortress of Jeb, before our days and before Cambyses, and afterwards destroyed by the accursed Waidrang in the fourteenth year of king Darius, that it be rebuilt in its own place, as it was before; meal offering and frankincense to be again offered at the altar as in the ancient days." It will be noticed that *burnt offerings* are not mentioned here. The offering of rams, it is thought by Professor Gunkel, was not to be allowed, lest the anger of the worshipers of Chnûb, the ram-headed god, should be again aroused.

To a layman, in such matters, at least, it seems strange to find that, in this temple at Elephantiné, a company of priests under a chief-priest had been accustomed to present in the worship of Jehovah, sacrifices directed by the 'Priest Code,' which many critics assure us, was promulgated by Ezra in 444 B.C.—a mode of worship which had evidently been practiced there before 525 B.C., when Cambyses conquered Egypt, 81 years earlier.

If Bagoas and Sanballat were legendary characters, as Winckler has asserted, it seems strange to find them mentioned as real persons here, and one of them, and the son of the other earnestly appealed to for help. If Sanballat was governor of Samaria under "the last king of Persia" at the coming of Alexander the Great in 331 B.C., as critics following Josephus hold, it seems strange to find two of his sons men of influence in 408 B.C., 77 years before. If Nehemiah and Ezra flourished in the time of Artaxerxes II, (d. 359) as some have lately contended, we are filled with wonder when we find the grandson of their contemporary, Eliashib, appealed to as high priest in 411 B.C. by the Jews in Elephantiné. Grandsons do not usually precede their grandfathers. If new problems are raised by these discoveries, as some critics think, here are some that will be quite old when these are solved.

⁷This 'protocol,' he tells us, was translated by Smend and Zidzbavski.

These papyri seem to settle several things which have been questioned:

1. That Ezra and Nehemiah lived at the time represented in the books bearing their names.
2. That the ritual of worship laid down in Leviticus was followed long before the time of Ezra, and therefore was not originated by him.
3. That since the Aramaic of these documents shows that Aramaic documents quoted in Ezra, and the Aramaic passages in Daniel do not indicate a later origin than that traditionally assigned these books, critics are forced to find other reasons for discrediting them.
4. That such characters as Sanballat and Johanan mentioned in Nehemiah and Bagoas, the Persian governor, were not mythological, but real men living in the time of Ezra and Nehemiah.

The whole result is an impression of reality and truth in the portraiture of the times as given in the books of Ezra and Nehemiah; and it is hardly possible to believe these most single hearted restorers of God's worship to have been either deceivers or deceived.

When we find Nehemiah humbly confessing, "We. . . . have not kept the commandments, nor the statutes, nor the ordinances which Thou commandedst by thy servant Moses," (Neh., i : 6, 7) and when we find the feast of Tabernacles kept with such faithfulness and joy, and read "For since the days of Joshua, the son of Nun, unto that day had not the children of Israel done so" and when we find it stated that "He [Ezra] day by day, from the first day unto the last day, read in the book of the law of God," who can believe that it was all a solemn farce in which Ezra was foisting a forgery on a credulous people, with Nehemiah joining in the deception? And Nehemiah implies quite accurate knowledge of the Jewish history "since the days of Joshua, the son of Nun," in speaking of a law that, though existing, was not observed during the long interval, showing us that the non-observance of an ordinance is no proof of its non-existence.

PARKE P. FLOURNOY.

Bethesda, Md.



BOOK REVIEWS

THE STONE AGE IN NORTH AMERICA¹

MANY years of close study and extensive travel, including months spent under the most trying circumstances, have gone to the making of this book which can be highly recommended both for the minuteness of its detail and the orderly arrangement of facts enabling the reader easily to grasp and retain them. Mr. Moorehead makes a strong argument for depending upon archaeological facts rather than upon folk-lore in reproducing the conditions of historic times. In case of western tribes of Indians we should have expected

¹*The Stone Age in North America.* By Warren K. Moorehead. In two volumes. Fully illustrated, \$7.50 net. Houghton-Mifflin Co. 1910. Boston and New York.

that they would have had some traditions of the Spanish Conquest, but none such are to be found among them. This is the more significant when we consider that it was their first acquaintance with firearms and their first knowledge of horses. From this it is evident that tradition among the Indians is of little historical value, and we are forced to believe that the study of concrete evidence is of most importance in reconstructing our knowledge of the prehistoric people of America.

Mr. Moorehead warmly praises the *Hand-book of American Indians*, considering it invaluable in the study of their past, but feels that it leaves a large field untouched, which he has undertaken to consider in these two profusely illustrated volumes. Special praise is given to Dr. Otis T. Mason for his ethnological studies and his efforts scientifically to classify Indian implements. From his investigations it would seem that in pre-Columbian times the natives were on the verge of discovering many new mechanical contrivances, having already the "reciprocating two-hand drill, the bow and strap drill, and the continuous motion spindle."

Dr. Peabody and Mr. Moorehead spent much time in classifying the objects in museums and finally reached a nomenclature which was accepted by the Anthropological Association. Attention is called to a most excellent paper prepared at the request of Dr. Rau of the Smithsonian Institution by Mr. Sellars when he was over 80 years of age. As this is now out of print, Mr. Moorehead reproduces it almost entire. It has special value since Mr. Sellars when a boy knew George Catlin and so, in a fair way represents the views of that high authority. Again on page 92, vol. 1, we are furnished an account of Cabeza De Vaca, one of the early Spanish explorers, quoting from his narrative the stories told by the Indians in describing the uses to which a flint knife could be put. An account is also given of a skull found in North Dakota which had been pierced by a flint arrowhead, showing with how much skill they were used against enemies. And this is only one of many instances.

The author concludes that then as now there must have been a class of men skilled in workmanship, since at various points great numbers of implements have been found indicating the location of workshops. Each man did not then make his own implement but the business of manufacturing was organized and perhaps led to the formation of a trust. In one room in a ruined Pueblo twenty-two axes were found, all showing the same workmanship, together with a number of other similar collections. In volume 1, page 157, this theory is supported by the illustration of a most perfect specimen of flint knife, of which only one other of the same pattern and such excellent workmanship has ever been found.

A few flint human heads have been found (vol. 1, pp. 162 and 165) together with many pieces for which no use can be imagined, and so they are put together under the vague term of ceremonial objects. The most remarkable of these come from Tennessee and Kentucky, where prehistoric graveyards abound. In addition to these, many crude implements have been found which evidently had been used for agricultural purposes. Special interest attaches to caches of implements which occur in all parts of the country, but which have been only partially reported. Mr. Moorehead

mentions one of unusual interest found by Dr. J. F. Snyder of Virginia, Ill., described in the *Archæologist* for October, 1903. The largest cache was found by Mr. Moorehead in 1891 and 1892 in the Hopewell group near Chillicothe, Ohio. From this cache there were taken 8,500 discs each about 6 in. in diameter and $\frac{1}{2}$ in. thick, being evidently raw material ready to be worked over at leisure.

The presence of different material in various sections of the country gives character to the implements in different regions. Flint Ridge near Newark, Ohio, furnished an inexhaustible mine for the best material available for spearheads and arrowheads, and it is in the Ohio Valley that some of the very best specimens are found. But implements are everywhere found which are made from material which must have been transported long distances. In a single mound in Ohio implements and ornaments are found made from obsidian, which must have come from the Rocky Mountains, copper which must have come from Lake Superior, mica from North Carolina, and sea shells from the Gulf of Mexico and the Atlantic Ocean. But the predominant implements and ornaments were of local material, and bear marks of local fashions in workmanship. Wisconsin is rich in variety as well as in beauty of forms. In Illinois and Missouri yellow chert and white nodules of flint are the prevailing material. Iowa and Minnesota have a special kind of beautiful white flint. In Ohio the black flint with the white specks of the Mercer limestone was occasionally used. An illustration showing a flint object from Egypt tells how fashions differed in different parts of the world. The obsidian implements evidently were held in great esteem and were handed down as heirlooms and regarded as lucky stones. A number of pages of fine illustrations describe celts which seem to be a step on the way to the knife. Gouges, which seem to have been used for removing charred portions of wood, also have their fair share of notice. In northern United States and British Columbia ground axes were uncommon, evidently because the local material was not fitted for their manufacture.

Fully half of the second volume is given to the study of implements whose use is problematical. Among these are ranged all the gorgets and pendants of varying shape. Much attention, however, is given to tablets, a comparatively few of which have been found. The question arising is were they designed to convey a message, some of them being irregularly marked, or were they merely ornamental? Mr. Moorehead quotes approvingly from Mr. Fowke to the effect that the finest discs and in greatest numbers are found south of the Ohio River—those found in the Pueblo country being rarely concave as are many in the east.

Mr. Moorehead has arrived at some startling conclusions (vol. 2, p. 3), relating to the absence of inanimate objects in the ornamentation of prehistoric Indians. "I have never seen," he says, "an effigy of a mountain, a spring, a plant or a flower." This reminds one of Whittier's lines

Not for him the lesson drawn
From the mountain smit with dawn.
Star-rise, moon-rise, flowers of May,
Sunset's purple bloom of day,—
Took his life no hue from thence,
Poor amid such affluence?

Haply unto hill and tree
All too near of kin was he:
Unto him who stands afar
Nature's marvels greatest are;
Who the mountain purple seeks
Must not climb the higher peaks.

But we do find numerous specimens showing that the Indians were impressed by the animal life about them. Bird stones are numerous especially north of the Ohio River, also rude figures of the bear, the turtle, and the frog, with an occasional representation of the human form. These all occur at times as bowls of pipes of which great numbers have been found of all shapes and sizes, usually adorned with some rude etching or drawing.

The chapters on the food of prehistoric man and his method of preparing it are most instructive. Nuts, edible roots, and grasses did indeed often compose his bill of fare; but maize was everywhere cultivated and the kernels when dry had to be cracked or broken in some way. In accomplishing this there was finally evolved the mortar and pestle which have been in use the world over among primitive people. Prehistoric man in America was no exception in this regard to his cousins in Europe or elsewhere. Bone implements were largely used in their industries, and bone ornaments were everywhere in fashion. For these purposes the bones of animals were shaped to suit the various uses intended. Pendants, hairpins, and bracelets were much in favor. Special interest is aroused by the description of copper objects distributed widely from the center on Lake Superior where many partially worked mines have been discovered.

The collection of the Archæological and Historical Society under the charge of W. C. Mills has some remarkable specimens of pearl beads, one string of which is estimated by Mr. Kuntz to have been worth \$10,000 and to have required two or three generations of Indians for its collection. Most interesting of all, since the genuine article was not sufficient to meet the demand, the Mound-builders engaged in counterfeiting pearls, making clay balls of the size of pearls and covering them with a malleable mica to give them a shining appearance. Again our interest is stirred by the bags, moccasins, and leggings made of fibre of flax, flags, and leaves of cat-tails, calling to our mind the leggings and moccasins worn in Russia by peasants returning from long pilgrimages and who evidently had worn out the shoes with which they started from home, thus illustrating the tendency to reversion constantly present in the human race.

We have not space to mention the chapters on pottery of which many specimens are found. The author concludes that the Indian population of America in pre-Columbian times was much greater than it has been since, but that it never exceeded one million. The works of the mound builders and the extensive cemeteries indicate much larger population of Indians than has existed since measles and smallpox have decimated their numbers. Likewise the Indian population was always most numerous along the Mississippi River and its tributaries. "In the Cumberland and the Tennessee valleys such multitudes of them lived that even after a hundred years of ruthless destruction of the stone grave cemeteries, there still remained

thousands of unopened sepulchers." Fourteen years ago the author estimated that there were 3,292 various monuments and village sites recorded in Ohio. Since that time Professor Mills has greatly added to this number so that it is probable that there are at least 20,000 monuments great and small in the State.

The volume concludes with a cautious discussion of the antiquity of man in America and of the classification of ancient culture groups. As a whole the work is a splendid monument to the author's industry in collecting facts and to his skill in presenting them both in text and illustrations so that the reader cannot fail to get their meaning.

FLORENCE B. WRIGHT.



THE PAST AT OUR DOORS²

MACMILLAN and Company are issuing a series of *Readable Books of Natural Knowledge*, of which the present volume, *The Past at our Doors*, is the fourth. Within the compass of 190 pages the author amplifies the ancient saying, "There is nothing new under the sun," by tracing the origin of many present-day customs in matters of food, dress and homes. The author shows that much of contemporary life, apparently modern, is a survival or adaptation from earlier days. In some cases a word or custom has been retained while the origin has been obscured. What was common in one grade of society two or three centuries ago, has been preserved in another. Even the modern flat cannot claim novelty, for, in the XV century, many a London house belonging to the well-to-do class had a dugout cellar in addition to a first and second floor, thus furnishing accommodations for three separate families.

An index makes the material immediately available to the reader.



EDITORIAL NOTES

PAINTINGS AT PALENQUE.—Professor Eduard Seler of Berlin, on leave of absence in Mexico, has just discovered a set of ancient paintings on the walls of one of the apartments of the Palenque Palace.

STATUE OF APOLLO FROM ALGERIA.—Not long ago, according to reports, a statue of Apollo was discovered at Cherchell in Algeria. The sculptor is unidentified, but the work gives indications of belonging to the golden age of Hellenic art.

² *The Past at our Doors; or The Old in the New around us.* By Walter W. Skeat, M. A., Fellow of the Royal Anthropological Institute. Pp. xi, 198; 52 illustrations. 50 cents net. London and New York. The Macmillan Co. 1911.

MARKERS FOR THE SANTA FÉ TRAIL.—The county commissioners of San Miguel county, New Mexico, at a recent meeting decided to put in place the granite markers for the Santa Fe trail as soon as weather conditions permit. The markers are to be placed on the hill between Las Vegas and Watrous; the plaza, Old Town; Bernal; San Jose, Koloski. (See RECORDS OF THE PAST, vol. IX, p. 343.)

COPY OF BOOK OF THE DEAD.—The British Museum recently received a present of what is said to be next to the longest Egyptian papyrus known. It is 122 ft. long and 20 $\frac{1}{2}$ ft. wide. The characters are remarkably clear. It is a copy of the Theban Book of the Dead, with the addition of a collection of invocations, addresses and hymns to Amen-Ra, the great god of Thebes. It seems to have been written for the Princess Nesi-ta-nob-asher, between 1040 and 1000 B.C.

ARCHÆOLOGICAL SOCIETY IN INDIANA.—Plans are under way for the formation of a State Archæological Society in Indiana. F. W. Gottlieb of Morristown, and John Sexton Abercrombie of Rushville are leaders in the movement, the first as president and the latter as secretary. Such state societies are to be welcomed by all interested in archæology and in the preservation of archæological remains of all kinds. We wish the proposed organization success in every way.

YALE EXPEDITION TO PERU.—Hiram Bingham will leave New York early in June to spend 6 months in an expedition to Peru. He is to be accompanied by a geologist, a topographer and a naturalist. "Headquarters will be at Arequipa where the Harvard astronomical observatory is located. The work will be among the Inca ruins largely given to tracing the history of these wonderful people. An unexplored mountain and lake and some hitherto unknown territory will be studied.

"President Leguia became deeply interested in the research work conducted by Professor Bingham during his last visit to Peru two years ago, and has offered all possible facilities for the proposed expedition."

[*Peru To-day*, April, 1911.]

ACTIVITIES OF THE SCHOOL OF AMERICAN ARCHÆOLOGY FOR THE PRESENT YEAR.—Among the plans of the School of American Archæology for 1911 may be mentioned the work which the Utah Society will resume in May in the Navajo Mountain District, with Oljato, Utah as the field base. The ethnological and archæological survey of the Rio Grande Valley will be continued, the principal excavations to be in the Jemez District. Mr. Harrington will conduct investigations among the Indians of the Northwest. The citizens of Seattle have raised funds for this latter work.

A summer school in the field will be held during August at the canyon of El Rito de los Frijoles. Special announcements of the summer school will be sent on request addressed to Edgar L. Hewett, Director, Santa Fé, New Mexico.

